

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

**DEFENDANT APPLE INC.'S FIRST AMENDED ANSWER, AFFIRMATIVE DEFENSES, AND COUNTERCLAIMS TO PLAINTIFF'S FIRST AMENDED COMPLAINT**

Defendant Apple Inc. (“Apple”) files this First Amended Answer, Affirmative Defenses and Counterclaims to Plaintiff’s First Amended Complaint for Patent Infringement (the “Amended Complaint”) filed by U.S. Ethernet Innovations, LLC (“USEI”).

## I. ANSWER

## **NATURE OF THE ACTION**

1. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraph 1 and therefore denies the same.

2. To the extent the allegations set forth in paragraph 2 are directed at or alleged against Apple, Apple denies each and every allegation contained therein. To the extent the allegations in paragraph 2 are directed at or alleged against the other Defendants in this case, Apple is without sufficient information or knowledge to either admit or deny the allegations and therefore denies the same.

3. Apple admits that USEI seeks damages for each Defendant's alleged infringement of the Patents-in-Suit (U.S. Patent Nos. 5,307,459, 5,434,872, 5,732,094 and 5,299,313), but Apple denies liability for infringement of the patents-in-suit and that USEI is entitled to damages from Apple.

**PARTIES**

4. - 5. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 4 - 5 and therefore denies the same.

6. Apple admits that it is a California corporation organized and existing under the laws of California, with its principal place of business at One Infinite Loop, Cupertino, California 95014.

7. – 12. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 7 - 12 and therefore denies the same.

**JURISDICTION AND VENUE**

13. Apple admits that USEI alleges a civil action for patent infringement under the laws of the United States, Title 35 United States Code §§ 101, *et seq.*

14. Apple admits that this Court has subject matter jurisdiction over USEI's claims for patent infringement.

15. To the extent the allegations in paragraph 15 relate to Apple, Apple admits that venue is proper in this Court, but Apple denies that this judicial district is the most convenient forum for this case. Apple denies all other allegations in this paragraph to the extent such allegations relate to Apple. To the extent the allegations in paragraph 15 relate to the other Defendants in this case, Apple is without sufficient information or knowledge to either admit or deny the allegations and therefore denies the same.

16. To the extent the allegations in paragraph 16 relate to Apple, Apple admits that this Court has personal jurisdiction over Apple and denies all other allegations. To the extent the allegations in paragraph 16 relate to the other Defendants in this case, Apple is without sufficient information or knowledge to either admit or deny the allegations and therefore denies the same.

#### **PATENTS-IN-SUIT**

17. Apple admits that, according to the face of the patent, United States Patent No. 5,307,459 (“the ‘459 Patent”) is entitled “Network Adapter with Host Indication Optimization” and reflects an issue date of April 26, 1994. Apple admits that what appears to be a copy of the ‘459 patent is attached as Exhibit A to USEI’s Complaint and that 3Com Corporation is listed as assignee on the face of the patent. Apple denies all other allegations contained in paragraph 17 of USEI’s complaint.

18. Apple admits that, according to the face of the patent, United States Patent No. 5,434,872 (“the ‘872 Patent”) is entitled “Apparatus for Automatic Initiation of Data Transmission” and reflects an issue date of July 18, 1995. Apple admits that what appears to be a copy of the ‘872 patent is attached as Exhibit B to USEI’s Complaint and that 3Com Corporation is listed as assignee on the face of the patent. Apple denies all other allegations contained in paragraph 18 of USEI’s complaint.

19. Apple admits that, according to the face of the patent, United States Patent No. 5,732,094 (“the ‘094 Patent”) is entitled “Method for Automatic Initiation of Data Transmission” and reflects an issue date of March 24, 1998. Apple admits that what appears to be a copy of the ‘094 patent is attached as Exhibit C to USEI’s Complaint and that 3Com Corporation is listed as assignee on the face of the patent. Apple denies all other allegations contained in paragraph 19 of USEI’s complaint.

20. Apple admits that, according to the face of the patent, United States Patent No. 5,299,313 ("the '313 Patent") is entitled "Network Interface with Host Independent Buffer Management" and reflects an issue date of March 29, 1994. Apple admits that what appears to be a copy of the '313 patent is attached as Exhibit D to USEI's Complaint and that 3Com Corporation is listed as assignee on the face of the patent. Apple denies all other allegations contained in paragraph 20 of USEI's complaint.

21. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraph 21 and therefore denies the same.

### **ACCUSED PRODUCTS**

22. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraph 22 and therefore denies the same.

23. Apple admits that it imports, makes, uses, offers for sale, and/or sells the Macbook Pro and the Mac mini but denies that the Macbook Pro, Mac mini or any other Apple products embody any claims of the Patents-in-Suit. Apple further denies all other allegations contained in paragraph 23 of USEI's Complaint.

24. – 29. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 24 - 29 and therefore denies the same.

### **COUNT I**

#### **INFRINGEMENT OF U.S. PATENT NO. 5,307,459**

30. Apple restates its answers as set forth in paragraphs 1 through 29 of this Answer and incorporates them by reference.

31. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 31 and therefore denies the same.

32. Apple admits that it imports, makes, uses, offers for sale, and/or sells the Macbook Pro and the Mac mini but denies that the Macbook Pro, Mac mini, or any other Apple products embody any claims of the Patents-in-Suit. Apple further denies all other allegations contained in paragraph 32 of USEI's Complaint.

33. – 38. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 31 - 38 and therefore denies the same.

## COUNT II

### **INFRINGEMENT OF U.S. PATENT NO. 5,434,872**

39. Apple restates its answers as set forth in paragraphs 1 through 29 of this Answer and incorporates them by reference.

40. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 40 and therefore denies the same.

41. Apple admits that it imports, makes, uses, offers for sale, and/or sells the Macbook Pro and the Mac mini but denies that the Macbook Pro, Mac mini, or any other Apple products embody any claims of the Patents-in-Suit. Apple further denies all other allegations contained in paragraph 41 of USEI's Complaint.

42. – 47. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 42 - 47 and therefore denies the same.

## COUNT III

### **INFRINGEMENT OF U.S. PATENT NO. 5,732,094**

48. Apple restates its answers as set forth in paragraphs 1 through 29 of this Answer and incorporates them by reference.

49. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 49 and therefore denies the same.

50. Apple admits that it imports, makes, uses, offers for sale, and/or sells the Macbook Pro and the Mac mini but denies that the Macbook Pro, Mac mini, or any other Apple products embody any claims of the Patents-in-Suit. Apple further denies all other allegations contained in paragraph 50 of USEI's Complaint.

51. – 56. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 51 - 56 and therefore denies the same.

#### **COUNT IV**

##### **INFRINGEMENT OF U.S. PATENT NO. 5,299,313**

57. Apple restates its answers as set forth in paragraphs 1 through 29 of this Answer and incorporates them by reference.

58. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraph 55 and therefore denies the same.

59. Apple admits that it imports, makes, uses, offers for sale, and/or sells the Macbook Pro and the Mac mini but denies that the Macbook Pro, Mac mini, or any other Apple products embody any claims of the Patents-in-Suit. Apple further denies all other allegations contained in paragraph 59 of USEI's Complaint.

60. – 65. Apple is without sufficient information or knowledge to either admit or deny the allegations in paragraphs 60 - 65 and therefore denies the same.

#### **PRAYER FOR RELIEF**

66. Apple opposes USEI's requested relief against Apple or any other relief USEI requests against Apple.

**DEMAND FOR JURY TRIAL**

67. Apple also demands a trial by jury.

**DENIAL OF ANY REMAINING ALLEGATIONS**

68. Except as specifically admitted herein, Apple denies any remaining allegations in USEI's Complaint that are directed at Apple.

**II. AFFIRMATIVE DEFENSES**

69. Apple incorporates by reference the foregoing paragraphs in their entirety and asserts the following Affirmative Defenses.

**FIRST AFFIRMATIVE DEFENSE**  
**(No Infringement)**

70. Apple does not infringe and has not infringed any valid and enforceable claim of the '459, '872, '094, or '313 Patent.

71. Apple does not induce or contribute to and has not induced or contributed to infringement of any valid and enforceable claim of the '459, '872, '094, or '313 Patent.

**SECOND AFFIRMATIVE DEFENSE**  
**(Invalidity)**

72. The claims of the '459, '872, '094, and '313 Patent are invalid for failure to satisfy the conditions for patentability set forth in Title 35 of the United States Code, including without limitation §§ 101, 102, 103 and 112.

**THIRD AFFIRMATIVE DEFENSE**  
**(Laches)**

73. USEI's claims are barred in whole or in part by laches.

**FOURTH AFFIRMATIVE DEFENSE**  
**(Waiver)**

74. USEI's claims are barred in whole or in part by waiver.

**FIFTH AFFIRMATIVE DEFENSE**  
**(Estoppel)**

75. USEI's claims are barred in whole or in part by estoppel.

**SIXTH AFFIRMATIVE DEFENSE**  
**(Notice, Damages, and Costs)**

76. USEI's claims for damages, if any, against Apple are statutorily limited by 35 U.S.C. § 286 and/or § 287.

77. USEI is barred from recovering costs in connection with this action under 35 U.S.C. § 288.

**SEVENTH AFFIRMATIVE DEFENSE**  
**(License)**

78. Some or all of Apple's products are licensed under at least the '459, '872, '094, and '313 patents.

**EIGHTH AFFIRMATIVE DEFENSE**  
**(Sales to Government)**

79. USEI's claims are limited by 28 U.S.C. § 1498.

**NINTH AFFIRMATIVE DEFENSE**  
**(Inequitable Conduct)**

80. As more fully outlined below in Apple's Count III, specifically paragraphs 10-15, which are hereby incorporated by reference, the claims of the patents-in-suit are unenforceable due to inequitable conduct committed by the inventors, their counsel, 3Com Corporation, and/or others substantively involved in the prosecution of the patents-in-suit.

**RESERVATION OF AFFIRMATIVE DEFENSES**

81. Apple hereby reserves the right to supplement additional affirmative defenses as discovery proceeds in this case.

**III. COUNTERCLAIMS**

Incorporating by reference the foregoing paragraphs in their entirety, Apple asserts the following counterclaims against USEI.

## **PARTIES**

1. Counterclaim plaintiff is a California Corporation with its principal place of business at One Infinite Loop, Cupertino, California 95014.
2. On information and belief based on Plaintiff's First Amended Complaint, Counterclaim Defendant U.S. Ethernet Innovations, LLC is a Texas limited liability corporation, having a place of business located in Tyler, Texas.

## **JURISDICTION AND VENUE**

3. These counterclaims arise under the patent laws of the United States as enacted under Title 35 of the United States Code and the provisions of the Federal Declaratory Judgment Act. The jurisdiction of this Court is proper under 28 U.S.C. §§ 1331, 1338, 2201 and 2202.
4. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400.

## **COUNT I – DECLARATION OF NON-INFRINGEMENT**

5. Based on USEI's filing of this action and Apple's Affirmative Defenses, an actual controversy has arisen and now exists between USEI and Apple as to whether Apple has infringed or is infringing one or more claims of U.S. Patent Numbers 5,307,459 ("the '459 Patent"), 5,434,872 ("the '872 Patent"), 5,732,094 ("the '094 Patent"), and 5,299,313 ("the '313 Patent") (collectively the "Patents-in-Suit").

6. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that Apple does not infringe and has not infringed any valid and enforceable claim of the '459, '872, '094, and '313 Patents.

7. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that Apple does not induce or contribute to and has not induced or contributed to infringement of any valid and enforceable claim of the ‘459, ‘872, ‘094, and ‘313 Patents.

#### **COUNT II – DECLARATION OF PATENT INVALIDITY**

8. Based on USEI’s filing of this action and Apple’s Affirmative Defenses, an actual controversy has arisen and now exists between USEI and Apple as to the validity of the claims of the ‘459, ‘872, ‘094, and ‘313 Patents.

9. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that the ‘459, ‘872, ‘094, and ‘313 Patents are invalid.

#### **COUNT III – DECLARATION OF UNENFORCEABILITY**

10. Each of the Patents-in-Suit is unenforceable due to inequitable conduct committed by the inventors, their counsel, 3Com Corporation, and/or others involved in the prosecution of each of the Patents-in-Suit during their respective prosecutions. The particular circumstances constituting the inequitable conduct and the factual basis for this defense are detailed in the paragraphs below. In brief, the specifications of each of the ’459, ’872, and the ’094 Patents state that they are all related to the ’313 Patent, and the specifications and figures of each of the Patents-in-Suit have considerable overlapping material. As such, the Patents-in-Suit are related to each other and were in fact prosecuted by the same attorney. While the ’459 and the ’313 Patents were examined by one examiner at the United States Patent and Trademark Office (“USPTO”) and the ’872 and ’094 Patents were examined by a different examiner at the USPTO, their co-pendency was not disclosed to the respective examiners. Furthermore, during the

pendency of the three initial applications that ultimately led to the four Patents-in-Suit, other related applications were filed on variants of the technology at issue in this case. During the prosecution of these related applications, many references were cited against various combinations of elements claimed to be novel in the Patents-in-Suit, and, in a number of instances, claims drawn to those combinations were rejected. Despite having constructive or actual notice of these references, and despite having a duty to do so, those involved in the prosecution of the various applications leading to the Patents-in-Suit failed to disclose these references during the prosecutions of the other, related applications, including the applications leading to the issuance of the Patents-in-Suit. Neither was there disclosure of the rejections in parallel prosecutions of combinations that were material to pending claims of the applications that led to the Patents-in-Suit. Taken collectively, all these prosecutions and the art cited in them, as well as the various rejections by the various examiners suggest that the various elements claimed to be novel in the Patents-in-Suit are anticipated and/or obvious in light of the prior art. At the very least, the references cited against any one application that led to the Patents-in-Suit were relevant to the determination of novelty and non-obviousness of the other patents of the Patents-in-Suit and those involved in the prosecution of the Patents-in-Suit had a duty to disclose this information to the USPTO. Because the original assignee of the Patents-in-Suit, its counsel, and various of the named inventors on the Patents-in-Suit did not disclose the co-pendency of these applications, the material art cited during them, or the existence of adverse office actions by other examiners rejecting combinations claimed to be novel by the Patents-in-Suit, the examiners in the Patents-in-Suit were not aware of information that would have been material to their examination of the Patents-in-Suit. Many of the individuals with a duty of candor during the prosecutions leading to the Patents-in-Suit, thus, withheld information which they knew or

should have known to be material to the Patents-in-Suit. In light of the course of conduct by which the various prosecutions of the Patents-in-Suit and applications related to similar technology were each effectively “siloed” from one another, the applicants for the Patents-in-Suit engaged in inequitable conduct which renders each of the Patents-in-Suit unenforceable.

11. Apple alleges that the '459 Patent is unenforceable by reason of inequitable conduct during the prosecution of the application that led to the issuance of the '459 Patent (“the '459 Prosecution”) committed by the inventors, their counsel, 3Com Corporation, and/or others involved in the '459 Prosecution (collectively, “the '459 Applicants”) as outlined below:

- a. Application No. 07/920,898 (“the '459 Application”), which ultimately led to the '459 Patent, was filed on July 28, 1992 on behalf of named inventors Brian Peterson, W. Paul Sherer, David R. Brown, and Lai-Chin Lo (“the '459 Named Inventors”), and named assignee, 3Com Corporation. Mark Haynes acted as prosecution counsel from the filing of the '459 Application to the issuance of the '459 Patent. The '459 Patent issued on April 26, 1994.

The '872 Patent, PCT, and EP Applications

- b. The '459 Applicants committed inequitable conduct during the '459 Prosecution by failing to disclose the applications, rejections, and references related to another of the Patents-in-Suit, the '872 Patent.
- c. Application No. 07/920,893 (“the '872 Application”), which ultimately led to the '872 Patent, was filed on the same date as the '459 Application. Prosecution attorney Mark Haynes, named inventors Brian Peterson and David R. Brown, and assignee 3Com Corporation (collectively, “the '872 Applicants”) were also participants in the '459 Prosecution.

- d. A third person, W. Paul Sherer, was added as an inventor during the prosecution of the '872 patent. W. Paul Sherer was also a participant in the '459 Prosecution and is also one of the '872 Applicants.
- e. PCT Application PCT/US1993/007060 ("the '872 PCT") claims priority to the '872 Application (having substantially the same disclosure) and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and David Brown) and the same assignee (3Com Corporation) as the '459 Application. The European Patent Application EP 93918428 ("the '872 EP") bears the same filing date as the '872 PCT and entered into the region phase on February 25, 1994 based on the '872 PCT.
- f. The USPTO examiner for the '459 Application ("the '459 Examiner") was different from the examiner for the '872 Application ("the '872 Examiner") and the '872 PCT. The '459 Examiner was also different from the examiner for the '872 EP.
- g. The disclosures of the '459 Application and the '872 Application overlap to a significant extent.
- h. In his Notice of Allowability of October 14, 1993, the '459 Examiner stated that the pending claims of the '459 Application were being allowed because:

The prior art does not show or render obvious, inter alia, the claimed network frame transfer apparatus in which the data frame is transferred between a network transceiver and a host computer via a buffer and threshold logic is utilized to count the data transferred to and from the buffer and further in which an alterable storage location is provided which contains a threshold value and a counter, coupled to the buffer memory, is compared to the threshold value and an indication signal is generated and sent to the host computer responsive to the comparison.

- i. Shortly after the '459 Examiner sent the Notice of Allowability to prosecution attorney Mark Haynes indicating the '459 Examiner's belief that the prior art did not teach various elements of the '459 Patent, the '872 Examiner sent an Office action to Mr. Haynes on October 26, 1993. In this Office action, the '872 Examiner rejected claims (the "'872 Rejections) containing all of the limitations of the claims in the '459 Patent, except for the "indication signal," as anticipated and/or obvious in light of multiple prior art references. The '872 Rejections were material to the questions of novelty and/or obviousness of the claims in the '459 Application, and at least prosecution attorney Mark Haynes was aware of the '872 Rejections before the issuance of the '459 Patent.
- j. During the '872 Prosecution, the following references were reviewed by the '872 Examiner, were cited in support of the '872 Rejections, and were material to, but not disclosed during, the prosecution of the '459 Patent: U.S. Patents 5,043,981 (Firoozmand et al.); 4,860,193 (Bentley); 4,258,418 (Heath); 4,715,030 (Koch); 5,195,093 (Tarrab); 5,210,749 (Firoozmand) (collectively, "the '872 References").
- k. Brian Petersen, one of the '459 Named Inventors, executed a declaration on or about February 3, 1994 stating he was informed that pending claims 1, 3, 6 and 11 in the '872 Application were rejected as being anticipated based on Firoozmand, et al. David Brown, another of the '459 Named Inventors, executed the same declaration on or about February 15, 1994.

- l. The '872 References were material to, but not disclosed during, the '459 Prosecution. The '872 Examiner determined the '872 References disclosed singly or in obvious combination all limitations which the '459 Examiner determined to be missing from the prior art except the "indication signal" claimed in the '459 Patent. That latter limitation was, in fact, disclosed by, inherent in, and/or obvious in light of one or more of the '872 References. By way of example, the Firoozmand patent describes that "a received data line indicates that received data is present in the buffer 126 and is ready to be transferred to the system memory." 5,210,749 at col. 12:51-53. At the very least, a reasonable examiner would have wanted to review the '872 Rejections and the '872 References to determine their effect on the patentability of the '459 Application.
- m. During the '459 Prosecution, five of the '872 References (Firoozmand et al., Koch, Heath, Tarrab, and Firoozmand) were cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '872 Application in the December 7, 1993 '872 PCT International Search Report ("the '872 ISR"). These references were identified again by the searching authority as of "particular relevance," rendering the claimed invention anticipated or obvious.
- n. All of the '872 Applicants also participated in the '459 Prosecution, and were persons with a duty of candor before the USPTO in the '459 Prosecution. At least the prosecuting attorney (Mark Haynes) and assignee (3Com Corporation) were participants in the prosecutions of the '872 PCT and the '872 EP and were persons with a duty of candor in the '459 Prosecution.

- o. The '872 Applicants knew of facts material to the '459 Prosecution: (i) the co-pendency of the '872 Application, the '872 PCT, and the '872 EP, (ii) the '872 Rejections and the '872 ISR, and (iii) the '872 References. The '872 Applicants knew that the '872 Examiner had found these references to disclose most features of the combination which they had claimed to be novel in the '459 Application and which the '459 Examiner itemized in his Notice of Allowance. Further, they knew or should have known that the missing limitation was disclosed by, inherent in, or obvious in light of one or more of the '872 References or at a minimum that a reasonable examiner would have wanted to review the '872 References to make his own determination on that point.
- p. None of (i) the co-pendency of the '872 Application, the '872 PCT, and the '872 EP, (ii) the '872 Rejections and the '872 ISR, and (iii) the '872 References were disclosed in the '459 Prosecution.
- q. The '872 Application, the '872 PCT, the '872 EP, the '872 Rejections, and the '872 References were therefore concealed from the '459 Examiner by the '872 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '313 Patent, PCT, and EP Applications

- r. The '459 Applicants committed further acts of inequitable conduct during the '459 Prosecution by failing to disclose the applications and references related to the '313 Patent.
- s. Application No. 07/921,519 (the '313 Application), which ultimately led to the '313 Patent, was filed on the same date as the '459 Application. Prosecution

attorney Mark Haynes, named inventors Brian Peterson, W. Paul Sherer, David R. Brown, and Lai-Chin Lo, and assignee 3Com Corporation (collectively, “the ’313 Applicants”) were also participants in the ’459 Prosecution. All of the named inventors in the ’313 Application were named inventors in the ’459 Application.

- t. PCT Application PCT/US1993/007027 (“the ’313 PCT”) claims priority to the ’313 Application (having substantially the same disclosure) and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of all of the same named inventors (Brian Peterson, W. Paul Sherer, David R. Brown, and Lai-Chin Lo) and the same assignee (3Com Corporation) as the ’459 Application. The European Patent Application EP 93918401 (“the ’313 EP”), bears the same filing date as the ’313 PCT and entered into the region phase on February 25, 1994 based on the ’313 PCT.
- u. Although the ’459 Examiner was the same as the examiner for the ’313 Application (“the ’313 Examiner”), the Federal Circuit has held that the duty to cross-cite material information between related applications still holds in such situations. *See, e.g., McKesson Info. Solutions, Inc. v Bridge Med., Inc.*, 487 F.3d 897, 925 (Fed. Cir. 2007).
- v. The disclosures of the ’459 Application and the ’313 Application overlap to a significant extent. The ’459 Patent states that “[t]he present application is related to copending U.S. patent application entitled NETWORK INTERFACE WITH HOST INDEPENDENT BUFFER MANAGEMENT, Ser. No. 07/921,519, filed Jul. 28, 1992, which was owned at the time of invention and is currently owned by the same assignee.” That is, the ’459 Patent states that it is related to the ’313

Application, but no mention of the '459 Application is made in the '313 Application.

- w. On September 21, 1993, about a month before the '459 Examiner issued his Notice of Allowability in the '459 Application, the '313 Examiner issued a Notice of Allowability in the '313 Application.
- x. In the Notice of Allowability of the '313 Application, the '313 Examiner cited U.S. Patent 4,672,570 (Benken) ("the Benken Reference").
- y. The Benken Reference was material to, but not disclosed during, the '459 Prosecution.
- z. The Benken Reference relates to the limitations of the '459 Patent that call for a buffer memory, network interface logic, host interface logic, transferring a data frame, and an alterable storage location.

- aa. While the '459 Prosecution was still pending, the Benken Reference was cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '313 Application in the November 26, 1993 '313 PCT International Search Report ("the '313 ISR"). The '313 ISR further cited U.S. Patents 4,471,427 (Harris); 4,604,682 (Schwan et al.); and 5,121,390 (Farrell et al.) ("the '313 ISR References") as relevant to the '313 PCT.
- bb. The '313 ISR References relate to the limitations of the '459 Patent that call for a buffer memory, network interface logic, host interface logic, transferring a data frame, and an alterable storage location.
- cc. The Benken Reference and the '313 ISR References were material to the claims of the '459 Application because the features of the claims of the '459 Application

were disclosed by, inherent in, or obvious in light of one or more of these references.

- dd. All of the '313 Applicants were participants in the '459 Prosecution and had a duty of candor before the USPTO in the '459 Prosecution.
- ee. The '313 Applicants knew of facts material to the '459 Prosecution: (i) the co-pendency of the '313 PCT and the '313 EP, (ii) the '313 ISR, and (iii) the Benken Reference and the '313 ISR References. That is, they knew of the similarity in disclosure between the '459 Application and '313 Application, and they knew that the '313 Examiner had found the Benken Reference material to the '313 Application and the examiner for the '313 PCT had found the '313 ISR References material to the '313 PCT.
- ff. However, neither the co-pendency of the '313 PCT and the '313 EP, nor the '313 ISR, the Benken Reference, and the '313 ISR References were disclosed in the '459 Prosecution.
- gg. The '313 Application, the '313 PCT, the '313 ISR, the Benken Reference, and the '313 ISR References were therefore concealed from the '459 Examiner by the '313 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '752 Patent and PCT Application

- hh. The '459 Applicants committed further acts of inequitable conduct during the '459 Prosecution by additionally failing to disclose the applications, rejections, and references related to U.S. Patent 5,319,752 ("the '752 Patent").

- ii. Application No. 07/947,773 (the '752 Application), which ultimately led to the '752 Patent, was filed on September 18, 1992, about two months after the filing of the '459 Application. Prosecution attorney Mark Haynes, named inventors Brian Peterson and Lai-Chin Lo, and the assignee 3Com Corporation (collectively, "the '752 Applicants") were also participants in the '459 Prosecution.
- jj. PCT Application PCT/US1993/008866 ("the '752 PCT") claims priority to the '752 Application (having substantially the same disclosure) and was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and Lai-Chin Lo) and the same assignee (3Com Corporation) as the '459 and '752 Applications.
- kk. The '459 Examiner was different from the examiner for the '752 Application ("the '752 Examiner") and the '752 PCT.
- ll. The disclosures of the '459 Application and the '752 Application overlap to a significant extent.
- mm. The '752 Application and Patent state "[t]he present application is related to co-pending U.S. patent application entitled NETWORK ADAPTER WITH HOST INDICATION OPTIMIZATION, Ser. No. 07/920,898, filed Jul. 28, 1992, which was owned at the time of invention and is currently owned by the same assignee." That is, the '752 Application and Patent both state that they are related to the co-pending '459 Application, but no mention of the '752 Application is made in the '459 Application.

- nn. On January 26, 1993 and July 15, 1993, before the '459 Examiner issued his Notice of Allowability in the '459 Application, the '752 Examiner issued rejections (“the '752 Rejections”) of the '752 Application.
- oo. During prosecution of the '752 Application (“the '752 Prosecution”), the following references were cited: U.S. Patents 4,546,467 (Yamamoto); 4,680,581 (Kozlik); 4,866,666 (Francisco); 5,101,402 (Chiu); and 5,103,446 (Fisher) (collectively, “the '752 References”).
- pp. All of the '752 References reviewed by the '752 Examiner were material to but not disclosed during the '459 Prosecution.
- qq. Fisher relates to the limitations of the '459 Application that call for an indication signal and an interrupt signal. Yamamoto, Kozlik, Chui, and Fisher relate to the limitations of the '459 Application that call for a buffer memory. Yamamoto, Kozlik and Chiu relate to the limitations of the '459 Application that call for network interface logic. Kozlik, Chiu, and Fisher relate to the limitations of the '459 Application that call for transferring a data frame. Francisco relates to the limitations of the '459 Application that call for an alterable storage location containing a threshold value. Chiu relates to the limitations of the '459 Application that call for a counter for counting the amount of data transferred.
- rr. While the '459 Prosecution was pending, three of the '752 References (Yamamoto, Kozlik, and Fischer) were cited again to at least the assignee and prosecution attorney of the '752 Application in the December 23, 1993 '752 PCT International Search Report (the '752 ISR).

- ss. The '752 References were material to the claims of the '459 Application because the limitations of the claims of the '459 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- tt. All of '752 Applicants were participants in the '459 Prosecution and had a duty of candor before the USPTO in the '459 Prosecution.
- uu. Some or all of the '752 Applicants knew of facts material to the '459 Prosecution: (i) the co-pendency of the '752 Application and the '752 PCT, (ii) the '752 Rejections, the '752 ISR, and (iii) the '752 References. That is, they knew of the similarity in disclosure between the '459 Application and '752 Application, and they knew that the '752 Examiner had found the '752 References relevant to the '752 Application and the '752 PCT and had twice rejected the '752 Application.
- vv. However, neither the co-pendency of the '752 Application and the '752 PCT, nor the '752 Rejections, the '752 ISR, and the '752 References were disclosed in the '459 Prosecution.
- ww. The '752 Application, the '752 PCT, the '752 Rejections, and the '752 References were therefore concealed from the '459 Examiner by the '752 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '406 Patent and PCT Application

- xx. The '459 Applicants committed further acts of inequitable conduct during the '459 Prosecution by failing to disclose the applications, rejections, and references related to U.S. Patent 5,392,406 ("the '406 Patent").

- yy. Application No. 07/947,055 (“the ’406 Application”), which ultimately led to the ’406 Patent was filed on September 18, 1992, about two months after the filing of the ’459 Application. Prosecution attorney Mark Haynes, named inventors Brian Peterson, Lai-Chin Lo, and David R. Brown, and assignee 3Com Corporation (collectively, “the ’406 Applicants”) were also participants in the ’459 Prosecution.
- zz. PCT Application PCT/US1993/008840 (the ’406 PCT) claims priority to the ’406 Application (having substantially the same disclosure) and was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of three of the same named inventors (Brian Peterson, Lai-Chin Lo, and David R. Brown) and the same assignee (3Com Corporation) as the ’459 and ’406 Applications.
- aaa. The ’459 Examiner was different from the examiner for the ’406 Application (“the ’406 Examiner”) and the ’406 PCT.
- bbb. The disclosures of the ’459 Application and the ’406 Application overlap to a significant extent.
- ccc. On November 9, 1993 and April 26, 1994, the ’406 Examiner issued rejections (“the ’406 Rejections”) of the ’406 Application.
- ddd. During prosecution of the ’406 Patent, the following references were cited: U.S. Patents 4,447,878 (Kinnie); 4,506,345 (Boothroyd); 4,672,570 (Benken); 4,841,435 (Papenberg); 4,959,779 (Weber); 4,992,931 (Hirasawa); 5,014,186 (Chisholm); 5,058,051 (Brooks); 5,113,369 (Kinoshita); 5,125,080 (Pleva); 5,168,561 (Vo); 5,170,477 (Potter); 5,179,671 (Kelly); 5,185,876 (Nguyen); 5,274,763 (Banks); and 5,276,891 (Patel) (collectively, “the ’406 References”).

- eee. All of the '406 References relate to the limitations of the '459 Application that call for generating a signal. Benken, Brooks, Kinoshita, Pleva, Nguyen, and Banks relate to the limitations of the '459 Application that call for an indication signal. Benken, Brooks, Kinoshita, Pleva, Nguyen, and Banks relate to the limitations of the '459 Application that call for an interrupt signal. Benken, Brooks, and Banks relate to the limitations of the '459 Application that call for a buffer memory. Benken relates to the limitations of the '459 Application that call for transferring a data frame. Benken relates to the limitations of the '459 Application that call for a network interface logic. Benken relates to the limitations of the '459 Application that call for a transfer descriptor.
- fff. While the '459 Prosecution was ongoing, five of the '406 References (Vo, Benken, Kinoshita, Chisholm, and Weber) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '406 Application in the January 11, 1994 '406 PCT International Search Report ("the '406 ISR"). These references were considered by the searching authority as relevant and/or invalidating.
- ggg. The '406 References were material to the '459 Prosecution because many, if not all, the features of the claims of the '459 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- hhh. All of the '406 Applicants also participated in the '459 Prosecution and therefore had a duty of candor before the USPTO in the '459 Prosecution. At least the prosecution attorney (Mark Haynes) and the assignee (3Com Corporation) were

participants in the prosecution of the '406 PCT and were persons with a duty of candor in the '459 Prosecution.

- iii. Some or all of the '406 Applicants knew of facts material to the '459 Prosecution: (i) the co-pendency of the '406 Application and '406 PCT, (ii) the '406 Rejections and the '406 ISR, and (iii) the '406 References. That is, all of the '406 Applicants knew of the similarity in disclosure between the '459 Application and the '406 Application, and at least assignee 3Com Corporation and prosecution attorney Mark Haynes knew that the '406 Examiner had found the '406 References relevant to the '406 Application and the '406 PCT, and had twice rejected the '406 Application.
- jjj. However, the co-pendency of the '406 Application and the '406 PCT, the '406 Rejections, the '406 ISR, and the '406 References were not disclosed in the '459 Prosecution.
- kkk. The '406 Application, the '406 PCT, the '406 Rejections, and the '406 References were therefore concealed from the '459 Examiner by the '406 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '874 Patent and PCT Application

- ill. The '459 Applicants committed further inequitable conduct during the '459 Prosecution by failing to disclose the applications, rejections, and references related to U.S. Patent 5,530,874 ("the '874 Patent").
- mmm. Application No. 08/012,561 ("the '874 Application"), which ultimately led to the '874 Patent was filed on February 2, 1993. Prosecution attorney Mark Haynes,

named inventors Brian Peterson and W. Paul Sherer, and assignee 3Com Corporation of the '874 Application (collectively, "the '874 Applicants") were also participants in the '459 Prosecution.

- nnn. PCT Application PCT/US1993/012652 ("the '874 PCT") claims priority to the '874 Application (having substantially the same disclosure) and was filed on December 28, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and W. Paul Sherer) and the same assignee (3Com Corporation) as the '459 Application.
- ooo. The '459 Examiner was different from the examiner for the '874 Application ("the '874 Examiner") and the '874 PCT.
- ppp. The disclosures of the '459 Application and '874 Application overlap to a significant extent.
- qqq. The specification of '874 Application and Patent state "The present application is related to co-pending U.S. patent application entitled NETWORK ADAPTER WITH HOST INDICATION OPTIMIZATION, Ser. No. 07/920,898, filed Jul. 28, 1992, which was owned at the time of invention and is currently owned by the same assignee." That is, the '874 Application and Patent both state that they are related to the co-pending '459 Application. However, no mention of the '874 Application is made in the '459 Application.
- rrr. All of the '874 Applicants also participated in the '459 Prosecution and therefore were persons with a duty of candor before the USPTO in the '459 Prosecution. At least the prosecution attorney (Mark Haynes) and assignee (3Com

Corporation) were participants in the prosecution of the '874 PCT and were persons with a duty of candor in the '459 Prosecution.

sss. The '874 Applicants, who all participated in the '459 Prosecution, knew of facts material to the '459 Prosecution: the co-pendency of the '874 Application and the '874 PCT. That is, they knew of the similarity in disclosure between the '459 Application and the '874 Application.

ttt. However, neither the co-pendency of the '874 Application nor of the '874 PCT, were disclosed in the '459 Prosecution.

uuu. The co-pendency of the '874 Application and the '874 PCT were therefore concealed from the '459 Examiner by the '874 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '627 Patent and PCT Application

vvv. The '459 Applicants committed further acts of inequitable conduct during the '459 Prosecution by failing to disclose the application and references related to U.S. Patent 5,517,627 ("the '627 Patent").

www. Application No. 08/113,417 ("the '627 Application"), which ultimately led to the '627 Patent was a continuation-in-part application of the '406 Patent and was filed on Aug 27, 1993. Prosecution attorney Mark Haynes, named inventor Brian Peterson, and assignee 3Com Corporation (collectively, "the '627 Applicants") were also participants in the '459 Prosecution.

xxx. The '459 Examiner was different from the examiner for the '627 Application ("the '672 Examiner").

yyy. During the '459 Prosecution and before the '459 Patent issued, on February 7, 1994, prosecution attorney Mark Haynes filed an Information Disclosure Statement ("the '627 IDS") citing ten references. These references were Kinnie; Benken; Weber; Chisholm; Brooks; Kinoshita; Pleva; Vo; 5,179,671 (Kelly); and Nguyen (collectively, "the '627 IDS References"). Since the '627 IDS References were cited in the '627 Application, Mr. Haynes knew of these references at least as of the date on which the '627 IDS was filed.

zzz. All of the '406 References relate to the limitations of the '459 Application that call for generating a signal. Benken, Brooks, Kinoshita, Pleva, Kelly, and Nguyen relate to the limitations of the '459 Application that call for an indication signal. Benken, Brooks, Kinoshita, Pleva, and Nguyen relate to the limitations of the '459 Application that call for an interrupt signal. Benken, Brooks, and Kelly relate to the limitations of the '459 Application that call for a buffer memory. Benken relates to the limitations of the '459 Application that call for transferring a data frame. Benken relates to the limitations of the '459 Application that call for a network interface logic. Benken relates to the limitations of the '459 Application that call for a transfer descriptor. Despite having knowledge of the '627 IDS References, Mr. Haynes and the other '627 Applicants failed to disclose these references to the '459 Examiner.

aaaa. The '627 References were material because some or all of the features of the claims of the '459 Application were disclosed by, inherent in, or obvious in light of one or more of these references. At the very least, a reasonable examiner

would have wanted to review the '627 IDS References to determine their effect on the patentability of the '459 Application.

- bbbb. All of the '627 Applicants also participated in the '459 Prosecution and therefore had a duty of candor before the USPTO in the '459 Prosecution.
- cccc. Some or all of the '627 Applicants knew of facts material to the '459 Prosecution:
  - (i) the co-pendency of the '627 Application, and (ii) the '627 IDS and the '627 IDS References. That is, they knew of the '627 IDS References and knew that these references were material to the '627 Application. They also knew that the '627 IDS References were material to the '459 Prosecution.
- dddd. However, neither the co-pendency of the '627 Application, nor the '627 IDS and the '627 IDS References were disclosed in the '459 Prosecution.
- eeee. The '627 Application, the '627 IDS, and the '627 IDS References were therefore concealed from the '459 Examiner by the '627 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '782 Patent

- ffff. The '459 Applicants committed further acts of inequitable conduct during the '459 Prosecution by additionally failing to disclose the application, rejection, and references related to U.S. Patent 5,412,782 ("the '782 Patent").
- gggg. Application No. 07/907,946 ("the '782 Application"), which ultimately led to the '782 Patent, was filed on July 2, 1992, within one month of the filing of the '459 Application. Named inventor Paul W. Sherer and the assignee 3Com Corporation (collectively, "the '782 Applicants") were also participants in the '459 Prosecution.

hhhh. The '459 Examiner was different from the examiner for the '782 Application ("the '782 Examiner").

iiii. The disclosures of the '459 Application and the '782 Application relate to substantially the same subject matter. For example, the '782 Patent discloses early receive interrupts. This directly relates to the alleged invention claimed in the '459 Patent.

jjjj. On January 14, 1994, before the '459 Patent issued, the '782 Examiner issued a rejection ("the '782 Rejection") of the '782 Application.

kkkk. During the prosecution of the '782 Application ("the '782 Prosecution") and in the '782 Rejection, the '782 Examiner cited U.S. Patent 4,768,190 ("the Giancarlo Reference").

llll. Giancarlo relates to the limitations of the '459 Patent that call for generating an interrupt signal, a buffer memory, and transferring a data frame.

mmmm. The Giancarlo Reference was material to the claims of the '459 Application because the limitations of the claims of the '459 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

nnnn. The '782 Applicants were participants in the '459 Prosecution and had a duty of candor before the USPTO in the '459 Prosecution. That is, named inventor Paul W. Sherer and assignee 3Com Corporation had a duty of candor in the '459 Prosecution.

oooo. The '782 Applicants knew of facts material to the '459 Prosecution: (i) the co-pendency of the '782 Application, (ii) the '782 Rejection, and (iii) the Giancarlo Reference. That is, all of the '782 Applicants knew of the similarity in subject

matter between the '459 Application and the '782 Application, and they knew that the '782 Examiner had found the Giancarlo Reference relevant to the '782 Application and had rejected the '782 Application.

- pppp. However, neither the co-pendency of the '782 Application, nor the '782 Rejection and the Giancarlo Reference were disclosed in the '459 Prosecution.
- qqqq. The '782 Application, the '782 Rejection, and the Giancarlo Reference were therefore concealed from the '459 Examiner by the '782 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.
- rrrr. The existence of other patent applications that were co-pending with the '459 Patent, related to networking technology, and owned by 3Com Corporation or their subsidiary or associated corporation, including the applications' related foreign filings, and all material references cited in the applications' prosecution were not cited during the '459 Prosecution. These other patent applications include the applications for U.S. Patents: 5,459,854; 5,392,399; 5,471,618; 5,483,640; 5,511,171; 5,459,840; 5,526,489; 5,386,470; 5,387,902; 5,473,765; and 5,423,002.
- ssss. Some or all of the persons with a duty of candor in the '459 Prosecution, were participants in the prosecution of these other patent applications. Some or all of the persons with a duty of candor in the '459 Prosecution knew that these other applications were material to the '459 Prosecution.

tttt. On information and belief, these other applications and materials were concealed from the '459 Examiner by the '459 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

Intel 82586 Local Area Network Coprocessor

uuuu. Intel 82586 local area network coprocessor and the documentation describing it (“the Intel 82586”) is material prior art as defined by 37 C.F.R. § 1.56(b) because, as is set forth more fully in Defendants’ P.R. 3-3 Invalidity Contentions filed June 4, 2010 (hereby incorporated by reference as if more fully set forth herein), the Intel 82586 and the documentation describing it separately and collectively invalidates all of the asserted claims in the '459 Patent. Accordingly, a reasonable examiner would have found that the Intel 82586 and the documentation describing it, alone or in combination with other information, was material to the prosecution of the '459 Patent because, at a minimum, it established a prima facie case of unpatentability for all claims in the '459 Patent.

vvvv. Further, the Intel 82586 was known by the '459 Applicants to be prior art material to the application which led to the '459 Patent, because the Intel 82586 is recited as relevant prior art in the Background of the Invention section of the '459 Application.

wwww. On information and belief, some or all of '459 Applicants had full knowledge of the operation and features of the Intel 82586, because they were able to summarize certain aspects of the operations and features of the Intel 82586 in the Background Section of the '459 Patent.

xxxx. The prosecution history of the '459 Patent demonstrates that the '459 Applicants withheld the source of their information concerning the operation and functionality of the Intel 82586 from the PTO during the filing and prosecution of the '459 Application because only very limited disclosure was made of the Intel 82586 chip in the background of the '459 Patent and no documentation describing its features or functionality was provided to the USPTO, despite the fact that the chip and its documentation must have been known to some or all of the '459 Applicants in order to provide the information set forth in the Background Section of the '459 Patent.

yyyy. As is set forth more fully in Defendants' Invalidity Contentions, the documentation for the Intel 82586 would have disclosed that the '459 Applicants' description of the functionality and operation of that chip was incomplete and misleading and that, in fact, the chip and its documentation invalidated at least all of the asserted claims of the '459 Patent.

zzzz. A reasonable examiner also would have found that the '459 Applicants' description of the Intel 82586 and the '459 Applicants' assertions of patentability for the '459 Application were inconsistent with, and refuted by, the features and operation of the Intel 82586 and that the documentation demonstrating these inconsistencies, but withheld by some or all of the '459 Applicants, was not cumulative to information in the prosecution record, including cited references and documented communications between the '459 Applicants and PTO.

aaaaa. The prosecution history of the '459 Patent therefore demonstrates that the '459 Applicants who were knowledgeable about the features and operation of the Intel

82586 chip misrepresented and knowingly and intentionally concealed material information regarding the state of the prior art, and specifically the features and operation of the Intel 82586.

bbbbbb. The '459 Patent is therefore unenforceable due to inequitable conduct.

12. Apple alleges that the '872 Patent is unenforceable by reason of inequitable conduct during the prosecution of the application that led to the issuance of the '872 Patent ("the '872 Prosecution") committed by the inventors, their counsel, 3Com Corporation, and/or others involved in the prosecution of the '872 Patent (collectively, "the '872 Applicants") as outlined below. In particular, Apple alleges that:

a. The '872 Application, which ultimately led to the '872 Patent, was filed on the same date as the '459 Application on behalf of named inventors Brian Peterson and David R. Brown and named assignee, 3Com Corporation. Ultimately, a third inventor (W. Paul Sherer) was added as a named inventor on what became the '872 Patent. Mark Haynes acted as prosecution counsel from the filing of the '872 application to the issuance of the '872 Patent. The '872 Patent issued on July 18, 1995.

The '313 Patent, PCT, and EP Applications

b. The '872 Applicants committed further acts of inequitable conduct during the '872 Prosecution by failing to disclose the applications and references related to the '313 Patent.

c. The '313 Application, which ultimately led to the '313 Patent, was filed on the same date as the '872 Application. Most of the '313 Applicants were also participants in the '872 Prosecution. That is, prosecution attorney Mark Haynes,

named inventors Brian Peterson, W. Paul Sherer, and David R. Brown, and assignee 3Com Corporation were also participants in the '872 Prosecution.

- d. The '313 PCT claims priority to the '313 Application (having substantially the same disclosure) and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of all of the same named inventors (Brian Peterson, W. Paul Sherer, and David R. Brown) and the same assignee (3Com Corporation) as the '872 Application. The '313 EP, based on the '313 PCT, entered the regional phase on February 25, 1994.
- e. The '872 Examiner was different from the '313 Examiner and the examiner for the '313 PCT.
- f. The disclosures of the '872 Application and the '313 Application overlap to a significant extent. The '872 Patent states that “[t]he present application is related to co-pending U.S. patent application entitled NETWORK INTERFACE WITH HOST INDEPENDENT BUFFER MANAGEMENT, application Ser. No. 07/921,519, filed Jul. 28, 1992, now U.S. Pat. No. 5,299,313, which was owned at the time of the invention and is currently owned by the same assignee.” That is, the '872 Patent states that it is related to the '313 Application (and the ultimately issued '313 Patent), but no mention of the '872 Application is made in the '313 Application.
- g. On September 21, 1993, about a month before the '872 Examiner issued his first Office action in the '872 Application, the '313 Examiner issued a Notice of allowability in the '313 Application.

- h. In the Notice of Allowability of the '313 Application, the '313 Examiner cited the Benken Reference.
- i. The Benken Reference was material to but not disclosed during the '872 Prosecution.
- j. The Benken Reference relates to the limitations of the '872 Patent that call for a buffer memory, network interface means, host interface means, means for initiating transmission of a frame, a transmit descriptor ring buffer, and a CSMA/CD (i.e., an Ethernet) network.
- k. While the '872 Application was still pending, the Benken Reference was cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '313 Application on November 26, 1993 in the '313 ISR. The '313 ISR further cited the '313 ISR References as relevant to the '313 PCT.
- l. The '313 ISR References relate to the limitations of the '872 Application that call for a buffer memory and a network interface means. At least Harris and Farrell relate to the limitations of the '872 Application that call for a host interface means. At least Harris, Schwan, and Farrell relate to the limitations of the '872 Application that call for a means for initiating transmission of a frame.
- m. Furthermore, while the '872 Application was still pending, another reference was cited in a Supplementary European Search Report ("the '313 EP SSR"), dated May 2, 1994, as a result of the examination of the '313 EP. As a result of the '313 EP SSR, at least prosecution attorney Mark Haynes and 3Com Corporation became aware of U.S. Patent 4,947,366 ("the Johnson Reference"). The Johnson Reference relates to the limitation of the '872 Application that calls for

transferring data to a buffer memory. The European examiner indicated in the '313 EP SSR that the Johnson Reference was "particularly relevant if taken alone."

- n. The Benken Reference, the '313 ISR References, and the Johnson Reference were material to the claims of the '872 Application because the features of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- o. Most of the '313 Applicants were participants in the '872 Prosecution and had a duty of candor before the USPTO in the '872 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Peterson, W. Paul Sherer, and David R. Brown, and assignee 3Com Corporation all had a duty of candor in the '872 Prosecution.
- p. The '313 Applicants knew of facts material to the '872 Prosecution: (i) the co-pendency of the '313 PCT and the '313 EP, (ii) the '313 ISR and the '313 EP SSR, and (iii) the Benken Reference, the '313 ISR References, and the Johnson Reference. That is, they knew of the similarity in disclosure between the '872 Application and '313 Application, and they knew that the '313 Examiner had found the Benken Reference material to the '313 Application. They also knew that the examiner for the '313 PCT had found the '313 ISR References material to the '313 PCT and the examiner for the '313 EP had found the Johnson Reference material to the '313 EP.

- q. However, neither the co-pendency of the '313 Application, the '313 PCT, and the '313 EP, nor the '313 ISR, '313 EP SSR, the Benken Reference, and the '313 ISR References were disclosed in the '872 Prosecution.
- r. The '313 Application, the '313 PCT, the '313 EP, the '313 ISR, '313 EP SSR, the Benken Reference, and the '313 ISR References were therefore concealed from the '872 Examiner by the '313 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '459 Patent, PCT, and EP Applications

- s. The '872 Applicants committed inequitable conduct during the '872 Prosecution by failing to disclose the applications, rejections, and references related to another of the Patents-in-Suit, the '459 Patent.
- t. The '459 Application, which ultimately led to the '459 Patent, was filed on the same date as the '872 Application. The '872 Applicants, namely, prosecution attorney Mark Haynes, named inventors Brian Petersen, David R. Brown, and W. Paul Sherer, and named assignee 3Com Corporation were also participants in the '872 Prosecution.
- u. PCT Application PCT/US1993/007056 ("the '459 PCT") claims priority to the '459 Application and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of three of the same named inventors (Brian Petersen, David R. Brown, and W. Paul Sherer) and the same named assignee (3Com Corporation) as the '872 Application. The European Patent Application EP 93918424 ("the '459 EP") bears the same filing date as the '459 PCT and entered into the regional phase on February 25, 1994 based on the '459 PCT.

- v. The '872 Examiner was different from the '459 Examiner and the examiner for the '459 PCT and the '459 EP.
- w. The disclosures of the '872 Application and the '459 Application overlap to a significant extent.
- x. During the '459 Prosecution, the following references were cited: U.S. Patents 4,852,088 (Gulick 1), 4,907,225 (Gulick 2), and 5,101,477 (Casper) (collectively, "the '459 References"). These references were cited to the '872 Applicants in the Notice of Allowability of October 14, 1993 of the '459 Application.
- y. All of the '459 References reviewed by the '459 Examiner were material to, but not disclosed during, the '872 Prosecution.
- z. All of the '459 References relate to the limitations of the '872 Application that call for a buffer memory. All references relate to the limitations of the '872 Application that call for a network interface means. All references relate to the limitations of the '872 Application that call for transferring frames of data. Finally, and perhaps most importantly, all references relate to the limitations of the '872 Application that call for threshold determination of an amount of data. At least Gulick 1 and Gulick 2 relate to the limitations of the '872 Application that call for a bad frame signal and to limitations that call for an underrun control logic.
- aa. While the '872 Prosecution was still pending, the '459 References (Gulick 1, Gulick 2, and Casper) were cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '459 Application in the November 15, 1993 of the '459 International Search Report (the '459 ISR).

bb. In the Response of February 23, 1994 during the '872 Prosecution, at least the prosecution counsel of the '872 Application disingenuously argued that:

In particular, the invention as recited in the new claims is limited to a CSMA/CD network adapter. This kind of network is fundamentally different from the FDDI network of Firoozmand, et al. In the FDDI environment, no transmissions are initiated until the transmitting station receives the token from the network. Thus, Firoozmand, et al. will not begin transmitting a first frame while the transmitting station has the token, unless at least one entire frame is present in the transmit buffer. *Firoozmand, et al. does not use the transmit threshold determination for a first frame in a transmission sequence. Rather, this threshold determination is only used in succeeding frames.* See Firoozmand, et al. column 10, line 53-68.

(Emphasis added). That is, prosecution attorney Mark Haynes distinguished some claims of the '872 Application from Firoozmand et al. on the basis of CSMA/CD.

cc. The '459 References were material to the claims of the '872 Application because many, if not all, the features of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references. For example, these references are related to using the threshold determination for any frame. The '872 Examiner would have, therefore, considered these references highly material because they could have been combined with Firoozmand et al. or other '872 references to make obvious the claims of the '872 Application directed to CSMA/CD.

dd. Furthermore, while the '872 Application was still pending, at least prosecution attorney Mark Haynes and assignee 3Com Corporation became aware of additional references in view of the Supplementary European Search Report ("the '459 EP SSR") dated April 27, 1994. The '459 EP SSR cited two additional references: "Early Interrupt for Disk Controller," IBM Technical Disclosure

Bulletin, vol. 25, no. 9, February 1983, p. 4703 (“the IBM Reference”) and U.S. Patent 5,179,709 (“Bailey”) (collectively, “the ’459 EP References”).

- ee. The IBM Reference relates to the limitation of the ’872 Application that calls for an alterable threshold store for storing a threshold value. Bailey relates to the limitation of the ’872 Application that calls for a buffer memory, means for monitoring the transferring of data to the buffer memory to make a threshold determination of an amount of data transferred to the buffer memory.
- ff. Moreover, during prosecution of Application No. 08/715,253 (the “’094 Application”), the continuation of the ’872 Application, the same examiner of both the ’872 and ’094 Applications discovered Gulick 1 on his own, considered it “pertinent to applicant’s disclosure” and cited it in the Office Action of March 19, 1996 in the ’094 Prosecution.
- gg. Almost all of the ’459 Applicants were participants in the ’872 Prosecution and had a duty of candor in the ’872 Prosecution. That is, at least prosecution attorney Mark Haynes, named inventors Brian Petersen, David R. Brown, and W. Paul Sherer, and named assignee 3Com Corporation had a duty of candor in the ’872 Prosecution.
- hh. Some or all of the ’872 Applicants knew of facts material to the ’872 Prosecution: (i) the co-pendency of the ’459 Application, the ’459 PCT, and the ’459 EP, (ii) the ’459 ISR and the ’459 EP SSR, and (iii) the ’459 References and the ’459 EP References. That is, they knew of the similarity in disclosure between the disclosures of the ’459 Patent and ’872 Patent and they knew that the ’459 Examiner had found the ’459 References relevant to the ’459 Application and the

'459 PCT and that the examiner for the '459 EP had found the '459 EP References relevant to the '459 EP.

- ii. However, neither the co-pendency of the '459 Application and the '459 PCT and the '459 EP, nor the '459 ISR, the '459 EP SSR, the '459 References, and the '459 EP References were disclosed in the '872 Prosecution.
- jj. The '459 Application, the '459 PCT, the '459 EP, the '459 ISR, the '459 EP SSR, the '459 References, and the '459 EP References were therefore concealed from the '872 Examiner by the '459 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

**'752 Patent, PCT, and EP Applications**

- kk. The '872 Applicants committed further acts of inequitable conduct during the '872 Prosecution by failing to disclose the applications, rejections, and references related to the '752 Patent.
- ll. The '752 Application which ultimately led to the '752 Patent, was filed on September 18, 1992, about two months after the filing of the '872 Application. Most of the '752 Applicants were also participants in the '872 Prosecution. That is, prosecution attorney Mark Haynes, named inventor Brian Peterson, and named assignee 3Com Corporation were also participants in the '872 Prosecution.
- mm. The '752 PCT was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of one of the same named inventors (Brian Peterson) and the same assignee (3Com Corporation) as the '872 Application. The European Patent Application EP 93921684 ("the '752 EP"), bears the same filing date as the '752 PCT and entered into the region phase on March 6, 1995 based on the '752 PCT.

- nn. The '872 Examiner was different from the '752 Examiner and the examiner for the '752 PCT and the '752 EP.
- oo. The disclosures of the '872 Application and '752 Application overlap to a significant extent.
- pp. At least the following '752 References reviewed by the '752 Examiner were material to, but not disclosed during, the '872 Prosecution: Yamamoto, Kozlik, Francisco, Chiu, and Fisher.
- qq. Yamamoto, Kozlik, and Fisher relate to the limitations of the '872 Application that call for a buffer memory. Yamamoto, Kozlik and Chiu relate to the limitations of the '872 Application that call for a network interface means. Kozlik, Chiu, and Fisher relate to the limitations of the '872 Application that call for transferring frames of data.
- rr. While the '872 Prosecution was pending, three of the '752 References (Yamamoto, Kozlik, and Fischer) were cited again to at least the assignee and prosecution attorney of the '752 Application on December 23, 1993 in the '752 ISR.
- ss. Further, while the '872 Application was still pending, at least prosecution attorney Mark Haynes and assignee 3Com Corporation became aware of additional references in view of the Supplementary European Search Report ("the '752 EP SSR") dated April 28, 1995. The '752 EP SSR cited two additional references: U.S. Patent 3,789,365 ("Jen") and the IBM Reference (collectively, "the '752 EP References").

- tt. Jen relates to limitations of the '872 Application that call for a buffer memory.
- The IBM Reference relates to the limitation of the '872 Application that calls for an alterable threshold store for storing a threshold value.
- uu. The '752 References and the '752 EP References were material to the claims of the '872 Application because the limitations of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- vv. Most of the '752 Applicants were participants in the '872 Prosecution and had a duty of candor before the USPTO in the '872 Prosecution.
- ww. The '752 Applicants knew of facts material to the '872 Prosecution: (i) the co-pendency of the '752 Application, the '752 PCT, and the '752 EP (ii) the '752 Rejections, the '752 ISR, and the '752 EP SSR, and (iii) the '752 References and the '752 EP References. That is, they knew of the similarity in disclosure between the '872 Application and '752 Application, and they knew that the '752 Examiner had found the '752 References relevant to the '752 Application and the '752 PCT, and had twice rejected the '752 Application. They also knew that the examiner for the '752 EP had found the '752 EP References relevant to the '752 EP.
- xx. However, neither the co-pendency of the '752 Application, the '752 PCT, and the '752 EP nor the '752 Rejections, the '752 ISR, the '752 EP SSR, the '752 References, and the '752 EP References were disclosed in the '872 Prosecution.
- yy. The '752 Application, the '752 PCT, the '752 EP, the '752 Rejections, the '752 ISR, the '752 EP SSR, the '752 References, and the '752 EP References were

therefore concealed from the '872 Examiner by the '872 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '406 Patent and PCT Application

- zz. The '872 Applicants committed further acts of inequitable conduct during the prosecution of the '872 Patent by failing to disclose the applications, rejections, and references related to the '406 Patent.
- aaa. The '406 Application, which ultimately led to the '406 Patent, was filed on September 18, 1992, about two months after the filing of the '872 Application. Most of the '406 Applicants were also participants in the '872 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Peterson and David R. Brown, and assignee 3Com Corporation were also participants in the '872 Prosecution.
- bbb. The '406 PCT was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and David R. Brown) and the same assignee (3Com Corporation) as the '872 Application.
- ccc. The '872 Examiner was different from the '406 Examiner and the examiner for the '406 PCT.
- ddd. The disclosures of the '872 Application and the '406 Application overlap to a significant extent.
- eee. All of the '406 References were material to, but not disclosed during, the '872 Prosecution.

fff. Kinnie, Boothroyd, Benken, Papenberg, Chisholm, Brooks, Kinoshita, Pleva, Vo, Potter, Kelley, Nguyen, and Banks relate to the limitations of the '872 Application that call for a buffer memory. Benken relates to the limitations of the '872 Application that call for transferring a data frame. Benken relates to the limitations of the '872 Application that call for a transmit descriptor.

ggg. While the '872 Prosecution was ongoing, five of the '406 References (Vo, Benken, Kinoshita, Chisholm, and Weber) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '406 Application on January 11, 1994 in the '406 ISR. These references were considered by the searching authority as relevant and/or invalidating.

hhh. The '406 References were material because the features of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

iii. All of the '406 Applicants also participated in the '872 Prosecution and therefore had a duty of candor before the USPTO in '872 Prosecution.

jjj. Some or all of the '406 Applicants knew of facts material to the '872 Prosecution: (i) the co-pendency of the '406 Application and the '406 PCT, (ii) the '406 Rejections, the '406 ISR, and (iii) the '406 References. That is, all of the '406 Applicants knew of the similarity in disclosure between the '872 Application and the '406 Application, and at least assignee 3Com Corporation and prosecution attorney Mark Haynes knew that the '406 Examiner had found the '406 References relevant to the '406 Application and the '406 PCT, and had twice rejected the '406 Application.

kkk. However, neither the co-pendency of the '406 Application and the '406 PCT, nor the '406 Rejections, the '406 ISR, and the '406 References were disclosed in the '872 Prosecution.

III. The '406 Application, the '406 PCT, the '406 Rejections, and the '406 References were therefore concealed from the '872 Examiner by the '406 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '627 Patent and PCT Application

mmm. The '872 Applicants committed further acts of inequitable conduct during the '872 Prosecution by failing to disclose the applications, rejections, and references related to the '627 Patent.

nnn. The '627 Application, which ultimately led to the '627 Patent was a continuation-in-part application of the '406 Patent and was filed on Aug 27, 1993. Prosecution attorney Mark Haynes, named inventor Brian Peterson, and assignee 3Com Corporation (collectively, "the '627 Applicants") were also participants in the '872 Prosecution.

ooo. PCT Application PCT/US1994/009723 ("the '627 PCT") claims priority to the '627 Application and was filed on August 25, 1994 by the same counsel (Mark Haynes) on behalf of one of the same named inventors (Brian Peterson) and the same assignee (3Com Corporation) as the '872 Application.

ppp. The '872 Examiner was different from the '672 Examiner and the '627 PCT.

qqq. On December 19, 1994, the '627 Examiner issued a rejection of the '627 Application ("the '627 Rejection").

rrr. During the '627 Prosecution, the following references were cited: 4,131,940 (Moyer); Kinnie; 4,455,606 (Cushing); 4,654,781 (Schwartz); 4,663,732 (Robinson); 4,667,305 (Dill); Benken; Weber; Hirasawa; Chisholm; Brooks; Kinoshita; Pleva; Vo; 5,179,671 (Kelly); Nguyen; Banks; and 5,297,242 (Miki) (collectively, "the '627 References").

sss. Prosecution attorney Mark Haynes cited ten of the '627 References (Kinnie, Benken, Weber, Chisholm, Brooks, Kinoshita, Pleva, Vo, Kelly, Nguyen) in an Information Disclosure Statement filing of February 4, 1994 ("the '627 IDS") in the '627 Application. Therefore, at least Mr. Haynes had knowledge of these references by February 4, 1994.

ttt. Of the '627 References, Moyer, Benken, and Brooks relate to the limitations of the '872 Application that call for a buffer memory. Benken relates to the limitations of the '872 Application that call for transferring a data frame. Benken relates to the limitations of the '872 Application that call for a transmit descriptor.

uuu. While the '872 Prosecution was pending, seven of the '627 References (Vo, Benken, Moyer, Schwartz, Hirasawa, Robinson, and Banks) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '627 Application in the February 13, 1995 '627 PCT International Search Report ("the '627 ISR"). Vo, Benken, and Moyer were identified by the searching authority as of particular relevance.

vvv. The '627 References were material because some of the features of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references. At the very least, a reasonable examiner would have

wanted to review the '627 Rejection and the '627 References to determine their effect on the patentability of the '872 Application.

www. All of the '627 Applicants also participated in the '872 Prosecution and therefore had a duty of candor before the USPTO in the '872 Prosecution. At least prosecution attorney (Mark Haynes) and assignee (3Com Corporation) were participants in the prosecution of the '627 PCT and were persons with a duty of candor in the '872 Prosecution.

xxx. Some or all of the '627 Applicants new of facts material to the '872 Prosecution: (i) the co-pendency of the '627 Application and the '627 PCT, (ii) the December 19, 1994 Rejection and the '627 ISR, and (iii) the '627 IDS and the '627 References. That is, they knew that the '627 Examiner had found the '627 References relevant to the '627 Application and the '627 PCT, and had rejected the '627 Application.

yyy. However, neither the co-pendency of the '627 Application and the '627 PCT, nor the '627 Rejection, the '627 ISR, and the '627 References were disclosed in the '872 Prosecution.

zzz. The '627 Application, the '627 PCT, the '627 Rejection, the '627 ISR, and the '627 References were therefore concealed from the '872 Examiner by the '872 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '874 Patent, PCT, and EP Applications

aaaa. The '872 Applicants committed further acts of inequitable conduct during the '872 Prosecution by failing to disclose the applications, rejections, and references related to the '874 Patent.

bbbb. The '874 Application, which ultimately led to the '874 Patent was filed on February 2, 1993. The '874 Applicants, namely prosecution attorney Mark Haynes, named inventors Brian Peterson and W. Paul Sherer, and assignee 3Com Corporation, were also participants in the '872 Prosecution.

cccc. The '874 PCT claims priority to the '874 Application (having substantially the same disclosure) and was filed on December 28, 1993 by the same counsel (Mark Haynes) on behalf of the two same named inventors (Brian Peterson and W. Paul Sherer) and the same assignee (3Com Corporation) as the '872 Application. The European Patent Application EP 94905972 ("the '874 EP"), bears the same filing date as the '874 PCT and entered into the region phase on July 13, 1995 based on the '874 PCT.

dddd. The '872 Examiner was different from the '874 Examiner and the examiner for the '874 PCT.

eeee. The disclosures of the '872 Application and the '874 Application overlap to a significant extent.

ffff. During prosecution of the '874 Patent, the following references were cited: U.S. Patents 3,905,025 (Davis); 4,349,872 (Fukasawa); 4,631,659 (Hayn); 4,768,149 (Konopik); 4,807,117 (Itoku); 4,847,752 (Akashi); 4,961,161 (Kojima); 4,987,535 (Takayama); 5,146,595 (Fujiyama); 5,161,228 (Yasui); 5,179,704 (Jibbe); 5,193,195 (Miyazaki); 5,283,904 (Carson) and articles Chiang, Al, "An EtherStar

is Born”, ESD: Magazine, Digital Design Publishing Company, March 1988 (“the Chiang Reference”); and EtherStar Ethernet/Starlan Controller, Fujitsu MB86950, May 1988 (“the Fujitsu Reference”) (collectively, “the ’874 References”).

gggg. On September 20, 1994 and May 19, 1995, the examiner of the ’874 Application (“the ’874 Examiner”) issued rejections of the ’874 Application (“the ’874 Rejections”).

hhhh. At least the following ’874 References reviewed by the ’874 Examiner were material to but not disclosed during the ’872 Prosecution: Davis, Fukasawa, Hayn, Konopik, Itoku, Akashi, Kojima, Takayama, Fujiyama, Yasui, Jibbe, Miyazaki, Carson, and the Chiang and Fujitsu References.

- iii. Davis, Akashi, Takayama, Yasui, Jibbe, Miyazaki, and Carson relate to the limitations of the ’872 Application that call for a buffer memory. Carson relates to the limitations of the ’872 Application that call for a network interface means. The Chiang and Fujitsu References relate to the limitations of the ’872 Application that call for a CSMA/CD network.
- jjjj. While the ’872 prosecution was pending, three of the ’874 References (Akashi, Takayama, and Fukasawa) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the ’874 Application in the August 1, 1994 ’874 PCT International Search Report (“the ’874 ISR”). These references were identified again by the searching authority as of particular relevance.

kkkk. These '874 References were material because the features of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

llll. All of the '874 Applicants also participated in the '872 Prosecution and therefore were persons with a duty of candor before the USPTO in the '872 Prosecution. At least the prosecution attorney (Mark Haynes) and assignee (3Com Corporation) were participants in the prosecution of the '874 PCT and were persons with a duty of candor in the '872 Prosecution.

mmmm. The '874 Applicants, who all participated in the '872 Prosecution, knew of facts material to the '872 Prosecution: (i) the co-pendency of the '874 Application, the '874 PCT, and the '874 EP, and (ii) the '874 Rejections and the '874 ISR, and (iii) the '874 References. That is, they knew of the similarity in disclosure between the disclosures of the '872 Application and '874 Application, and they knew that the '874 Examiner had found the '874 References relevant to the '874 Application and the '874 PCT, and that the '874 Examiner had twice rejected the '874 Application.

nnnn. However, neither the co-pendency of the '874 Application, the '874 PCT, and the '874 EP, nor the '874 Rejections, the '874 ISR, and the '874 References were disclosed in the '872 Prosecution.

oooo. The co-pendency of the '874 Application, the '874 PCT, and the '874 EP, the '874 Rejections, the '874 ISR, and the '874 References were therefore concealed from the '872 Examiner by the '874 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '782 Patent

pppp. The '872 Applicants committed further acts of inequitable conduct during the '872 Prosecution by additionally failing to disclose the application, rejection, and references related to the '782 Patent.

qqqq. The '782 Application, which ultimately led to the '782 Patent, was filed on July 2, 1992, within one month of the filing of the '872 Application. The '782 Applicants were also participants in the '872 Prosecution. That is, named inventor Paul W. Sherer and the assignee 3Com Corporation were also participants in the '872 Prosecution.

rrrr. The '872 Examiner was different from the '782 Examiner.

ssss. The disclosures of the '872 Application and the '782 Application relate to substantially the same subject matter. For example, the '782 Patent discloses a host interface and a receive threshold and therefore relates to the limitations of the '872 Application.

tttt. During the '872 Prosecution, the '782 Examiner issued rejections on January 14, 1994 and on July 7, 1994 ("the '782 Rejections").

uuuu. During the '782 Prosecution, the '782 Examiner reviewed the Giancarlo Reference as well as U.S. Patents 5,210,829 (Bitner) and 5,121,479 (O'Brien) (collectively, "the '782 References").

vvvv. Giancarlo relates to the limitations of the '872 Patent that call for a buffer memory, and transferring a data frame. Bitner relates to the limitations of the '872 Application that call for a host system alterable threshold store for storing a

threshold value. O'Brien relates to the limitations of the '872 Application that call for a buffer memory.

www. The '782 References were material to the claims of the '872 Application because the limitations of the claims of the '872 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

xxxx. The '782 Applicants were participants in the '872 Prosecution and had a duty of candor before the USPTO in the '872 Prosecution. That is, named inventor Paul W. Sherer and assignee 3Com Corporation had a duty of candor in the '872 Prosecution.

yyyy. The '782 Applicants knew of facts material to the '872 Prosecution: (i) the co-pendency of the '782 Application, (ii) the '782 Rejections, and (iii) the '782 References. That is, all of the '782 Applicants knew of the similarity in disclosure between the '872 Application and the '782 Application, and they knew that the '782 Examiner had found the '782 References relevant to the '782 Application and had twice rejected the '782 Application.

zzzz. However, neither the co-pendency of the '782 Application, nor the '782 Rejections and the '782 References were disclosed in the '872 Prosecution.

aaaaa. The '782 Application, the '782 Rejections, and the '782 References were therefore concealed from the '872 Examiner by the '782 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

bbbb. The existence of other patent applications that were co-pending with the '872 Patent, related to networking technology, and owned by 3Com Corporation

or their subsidiary or associated corporation, including the applications' related foreign filings, and all material references cited in the applications' prosecution were not cited during the '872 Prosecution. These other patent applications include the applications for U.S. Patents: 5,459,854; 5,392,399; 5,471,618; 5,483,640; 5,511,171; 5,459,840; 5,526,489; 5,386,470; 5,517,627; 5,387,902; 5,473,765; 5,423,002; 5,530,703; 5,541,911; and 5,535,338.

cccc. Some or all of the persons with a duty of candor in '872 Prosecution were participants in the prosecution of the other patent applications. Some or all of the persons with a duty of candor in the '872 Prosecution knew that these other applications were material to the '872 Prosecution.

ddddd. On information and belief, these other applications and materials were concealed from the '872 Examiner by the '872 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

#### The 82586 Local Area Network Coprocessor

eeee. Intel 82586 local area network coprocessor and the documentation describing it ("the Intel 82586") is material prior art as defined by 37 C.F.R. § 1.56(b) because, as is set forth more fully in Defendants' P.R. 3-3 Invalidity Contentions filed June 4, 2010 (hereby incorporated by reference as if more fully set forth herein), the Intel 82586 and the documentation describing it separately and collectively invalidates all of the asserted claims in the '872 Patent. Accordingly, a reasonable examiner would have found that the Intel 82586 and the documentation describing it, alone or in combination with other information, was

material to the prosecution of the '872 Patent because, at a minimum, it established a *prima facie* case of unpatentability for all claims in the '872 Patent.

fffff. Further, the Intel 82586 was known by the '872 Applicants to be prior art material to the application which led to the '872 Patent, because the Intel 82586 is recited as relevant prior art in the Background of the Invention section of the '872 Application.

ggggg. On information and belief, some or all of the '872 Applicants had full knowledge of the operation and features of the Intel 82586, because they were able to summarize certain aspects of the operations and features of the Intel 82586 in the Background Section of the '872 Patent.

hhhhh. The prosecution history of the '872 Patent demonstrates that the '872 Applicants withheld the source of their information concerning the operation and functionality of the Intel 82586 from the PTO during the filing and prosecution of the '872 Application because only very limited disclosure was made of the Intel 82586 chip in the background of the '872 Patent and no documentation describing its features or functionality was provided to the USPTO, despite the fact that the chip and its documentation must have been known to some or all of the '872 Applicants in order to provide the information set forth in the Background Section of the '872 Patent.

iiii. As is set forth more fully in Defendants' Invalidity Contentions, the documentation for the Intel 82586 would have disclosed that the '872 Applicants' description of the functionality and operation of that chip was incomplete and

misleading and that, in fact, the chip and its documentation invalidated at least all of the asserted claims of the '872 Patent.

jjjjj. A reasonable examiner also would have found that the '872 Applicants' description of the Intel 82586 and the '872 Applicants' assertions of patentability for the '872 Application were inconsistent with, and refuted by, the features and operation of the Intel 82586 and that the documentation demonstrating these inconsistencies, but withheld by some or all of the '872 Applicants, was not cumulative to information in the prosecution record, including cited references and documented communications between the '872 Applicants and PTO.

kkkkk. The prosecution history of the '872 Patent therefore demonstrates that the '872 Applicants who were knowledgeable about the features and operation of the Intel 82586 chip misrepresented and knowingly and intentionally concealed material information regarding the state of the prior art, and specifically the features and operation of the Intel 82586.

lllll. The '872 Applicants obtained allowance of claims then pending in the '872 Application as a result of not fully disclosing the Intel 82586 and withholding documentation concerning its features and functionality, by misrepresenting the true state of the prior art, and by misrepresenting how the Intel 82586 operated.

mmmmm. The '872 Patent is therefore unenforceable due to inequitable conduct.

13. Apple alleges that the '094 Patent is unenforceable by reason of inequitable conduct during the prosecution of the application that led to the issuance of the '094 Patent ("the '094 Prosecution") committed by the inventors, their counsel, 3Com Corporation, and/or others

involved in the prosecution of the '094 Patent ("the '094 Applicants") as outlined below. In particular, Apple alleges that:

- a. The '094 Application, which ultimately led to the '094 Patent, was filed as a continuation of the '872 Application on September 16, 1996 on behalf of named inventors Brian Peterson, W. Paul Sherer, and David R. Brown, and named assignee 3Com Corporation. Mark Haynes acted as prosecution counsel from the filing of the '094 Application to the issuance of the '094 Patent. The '094 Patent issued on March 24, 1998.

The '313 Patent, PCT and EP Applications

- b. The '094 Applicants committed further acts of inequitable conduct during the '094 Prosecution by failing to disclose the applications and references related to the '313 Patent.
- c. The '313 Application, which ultimately led to the '313 Patent, was filed on the same date as the '872 Application. Most of the '313 Applicants were also participants in the '094 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Peterson, W. Paul Sherer, and David R. Brown, and assignee 3Com Corporation were also participants in the '094 Prosecution.
- d. The '313 PCT claims priority to the '313 Application (having substantially the same disclosure) and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of all of the same named inventors (Brian Peterson, W. Paul Sherer, and David R. Brown) and the same assignee (3Com Corporation) as the '094 Application. The '313 EP, based on the '313 PCT, entered the regional phase on February 25, 1994.

- e. The '094 Examiner was different from the '313 Examiner and the examiner for the '313 PCT.
- f. The disclosures of the '094 Application and the '313 Application overlap to a significant extent. The '872 Patent states that “[t]he present application is related to co-pending U.S. patent application entitled NETWORK INTERFACE WITH HOST INDEPENDENT BUFFER MANAGEMENT, application Ser. No. 07/921,519, filed Jul. 28, 1992, now U.S. Pat. No. 5,299,313, which was owned at the time of invention and is currently owned by the same assignee.” That is, the '094 Patent states that it is related to the '313 Application, but no mention of the '094 Application is made in the '313 Application.
- g. On September 21, 1993 the '313 Examiner issued a Notice of Allowability in the '313 Application.
- h. In the Notice of Allowability of the '313 Application, the '313 Examiner cited the Benken Reference.
- i. The Benken Reference was material to but not disclosed during the '094 Prosecution.
- j. The Benken Reference relates to the limitations of the '094 Patent that call for transferring data of a frame to a buffer memory and initiating CSMA/CD (i.e., an Ethernet) transmission of the frame.
- k. The Benken Reference was cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '313 Application on November 26, 1993 in the '313 ISR. The '313 ISR further cited the '313 ISR References as relevant to the '313 PCT.

- l. The '094 Applicants therefore had knowledge of the Benken Reference and the '313 ISR References prior to filing the '094 Application.
- m. The '313 ISR References relate to the limitations of the '094 Application that call for transferring data of a frame to a buffer memory. At least Harris, Schwan, and Farrell relate to the limitations of the '094 Application that call for initiating transmission of a frame.
- n. Furthermore, at least prosecution attorney Mark Haynes and 3Com Corporation were aware of the Johnson Reference that was cited in the '313 EP SSR on May 2, 1994. The Johnson Reference relates to the limitation of the '094 Application that calls for transferring data to a buffer memory. The European examiner indicated in the '313 EP SSR that the Johnson Reference was "particularly relevant if taken alone."
- o. The Benken Reference, the '313 ISR References, and the Johnson Reference were material to the claims of the '094 Application because the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- p. Most of the '313 Applicants were participants in the '094 Prosecution and had a duty of candor before the USPTO in the '094 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Peterson, W. Paul Sherer, and David R. Brown, and assignee 3Com Corporation all had a duty of candor in the '094 Prosecution.
- q. The '313 Applicants knew of facts material to the '094 Prosecution: (i) the '313 PCT, the '313 EP, '313 ISR, and the '313 EP SSR, and (ii) the Benken Reference,

the '313 ISR References, and the Johnson Reference. That is, they knew of the similarity in disclosure between the '094 Application and '313 Application, and they knew that the '313 Examiner had found the Benken Reference material to the '313 Application. They also knew that the examiner for the '313 PCT had found the '313 ISR References material to the '313 PCT and that the examiner for the '313 EP had found the Johnson Reference material to the '313 EP.

- r. However, the '313 PCT, the '313 EP, the'313 ISR, the '313 EP SSR, the Benken Reference, the '313 ISR References, and the Johnson Reference were not disclosed in the '094 Prosecution.
- s. The '313 PCT, the '313 EP, the'313 ISR, the '313 EP SSR, the Benken Reference, the '313 ISR References, and the Johnson Reference were therefore concealed from the '094 Examiner by the '313 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '459 Patent, PCT and EP Applications

- t. The '094 Applicants committed inequitable conduct during the '094 Prosecution by failing to disclose the applications, rejections, and references related to another of the Patents-in-Suit, the '459 Patent.
- u. The '459 Application, which ultimately led to the '459 Patent, was filed on the same date as the parent of the '094 Application, the '872 Application. Most of the '459 Applicants were also participants in the '094 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Petersen, David R. Brown, and W. Paul Sherer, and named assignee 3Com Corporation, were also participants as the '094 Prosecution.

- v. The '459 PCT claims priority to the '459 Application and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of three of the same named inventors (Brian Petersen, David R. Brown, and W. Paul Sherer) and the same named assignee (3Com Corporation) as the '094 Application. The '459 EP bears the same filing date as the '459 PCT and entered the regional phase on February 25, 1994 based on the '459 PCT.
- w. The USPTO examiner for '094 Application ("the '094 Examiner") was different from the '459 Examiner and the examiner for the '459 PCT and the '459 EP.
- x. The disclosures of the '094 Application and the '459 Application overlap to a significant extent.
- y. In the Preliminary Amendment of March 3, 1995, the '094 Applicants added claims directed to CSMA/CD. When making a similar amendment in the parent application, the '872 Application, prosecution attorney mark Haynes argued that:

In particular, the invention as recited in the new claims is limited to a CSMA/CD network adapter. This kind of network is fundamentally different from the FDDI network of Firoozmand, et al. In the FDDI environment, no transmissions are initiated until the transmitting station receives the token from the network. Thus, Firoozmand, et al. will not begin transmitting a first frame while the transmitting station has the token, unless at least one entire frame is present in the transmit buffer. *Firoozmand, et al. does not use the transmit threshold determination for a first frame in a transmission sequence. Rather, this threshold determination is only used in succeeding frames.* See Firoozmand, et al. column 10, line 53-68.

(Emphasis added). February 23, 1994 Response, '872 Application.

- z. All of the '459 References reviewed by the '459 Examiner were material to, but not disclosed during, the '094 Prosecution.

- aa. All of the '459 References relate to the limitations of the '094 Application that call for a buffer memory. All references relate to the limitations of the '094 Application that call for a network interface device. All references relate to the limitations of the '094 Application that call for a frame transmission task. All references relate to the limitations of the '094 Application that call for a threshold determination based on a comparison of a count of data transferred and altering the threshold value. At least Gulick 1 and Gulick 2 relate to the limitations of the '094 Application that call for a bad frame signal and limitations that call for an underrun control logic.
- bb. The '459 References (Gulick 1, Gulick 2, and Casper) were cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the '459 Application on November 15, 1993 in the '459 ISR.
- cc. The '459 References were material to the claims of the '094 Application because many, if not all, the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references. For example, these references are related to using the threshold determination for any frame. The '094 Examiner would have, therefore, considered these references highly material because they could have been combined with Firoozmand et al. or other '094 References to make obvious the claims of the '094 Application directed to CSMA/CD. Moreover, during prosecution of the '094 Application, the '094 Examiner discovered Gulick 1 on his own, considered it "pertinent to applicant's disclosure", and cited it in the Office Action of March 19, 1996. This constitutes a finding by the '094 Examiner of the relevance to the '094

Application of the Gulick 1 reference. Yet the '094 Applicants failed to disclose it despite having knowledge of it.

- dd. Furthermore, at least prosecution attorney Mark Haynes and assignee 3Com Corporation were aware of additional references in view of the '459 EP SSR dated April 27, 1994. The '459 EP SSR cited the '459 EP References, namely, the IBM Reference and Bailey.
- ee. The IBM Reference relates to the limitation of the '094 Application that calls for an alterable threshold store for making a threshold determination. Bailey relates to the limitation of the '094 Application that calls for a buffer memory and monitoring the transfer of data to the buffer memory to make a threshold determination on an amount of data transferred to the buffer memory.
- ff. Almost all of the '459 Applicants were participants in the '094 Prosecution and had a duty of candor in the '094 Prosecution. That is, at least prosecution attorney Mark Haynes, named inventors Brian Petersen, David R. Brown, and W. Paul Sherer, and named assignee 3Com Corporation had a duty of candor in the '094 Prosecution.
- gg. Some or all of the '459 Applicants knew of facts material to the '094 Prosecution:
  - (i) the '459 Application, the '459 PCT, and the '459 EP,
  - (ii) the '459 ISR, and the '459 EP SSR,
  - and (iii) the '459 References and the '459 EP References.That is, they knew of the similarity in disclosure between the '459 Application and the '094 Application, and they knew that the '459 Examiner had found the '459 References relevant to the '459 Application and the '459 PCT and that the

examiner for the '459 EP had found the '459 EP References relevant to the '459 EP.

- hh. However, neither the '459 Application, the '459 PCT, and the '459 EP, nor the '459 ISR, the '459 EP SSR, the '459 References, and the '459 EP References were disclosed in the '094 Prosecution.
- ii. The '459 Application, the '459 PCT, the '459 EP, the '459 ISR, the '459 EP SSR, the '459 References, and the '459 EP References were therefore concealed from the '094 Examiner by the '459 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '956 Patent

- jj. The '094 Applicants committed further acts of inequitable conduct during the '094 Prosecution by failing to disclose U.S. Patent 5,278,956 ("the Thomsen Reference").
- kk. The '094 Applicants knew of the Thomsen Reference because it was cited during the prosecution of the parent Application to the '094 Application. That is, the Thomsen Reference was cited during the '872 Prosecution.
- ll. The Thomsen Reference would have been material because the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of the Thomsen Reference.
- mm. The Thomsen Reference relates to a buffer memory, transferring data, and a threshold determination.

- nn. The '094 Applicants, and in particular, prosecution attorney Mark Haynes and assignee 3Com Corporation had ample opportunity between December 21, 1994 to March, 19, 1996 to cite the Thomsen Reference, but failed to do so.
- oo. The '094 Examiner subsequently found the Thomsen Reference relevant and cited the Thomsen Reference in the Office Action of March 19, 1996 during the '094 Prosecution.
- pp. All of the '094 Applicants were participants in the prosecution of the '872 Patent and were persons with a duty of candor in the '094 Prosecution who knew of facts sufficient to establish the materiality to the '094 Prosecution of the Thomsen Reference.
- qq. On information and belief, the Thomsen Reference was concealed from the '094 Examiner by the '094 Applicants, with knowledge of its materiality and, on information and belief, with the intent to deceive.

The '752 Patent, PCT and EP Applications

- rr. The '094 Applicants committed further acts of inequitable conduct during the '094 Prosecution by failing to disclose the applications, rejections, and references related to the '752 Patent.
- ss. The '752 Application which ultimately led to the '752 Patent, was filed on September 18, 1992, about two months after the filing of the '872 Application, the parent application of the '094 Application. Most of the '752 Applicants were also participants in the '094 Prosecution. That is, prosecution attorney Mark Haynes, named inventor Brian Peterson, and named assignee 3Com Corporation were also participants in the '094 Prosecution.

tt. The '752 PCT was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of one of the same named inventors (Brian Peterson) and the same assignee (3Com Corporation) as the '094 Application. The '752 EP bears the same filing date as the '752 PCT and entered the region phase on March 6, 1995 based on the '752 PCT.

uu. The '094 Examiner was different from the '752 Examiner and the examiner for the '752 PCT and the '752 EP.

vv. The disclosures of the '094 Application and '752 Application overlap to a significant extent.

ww. At least the following '752 References reviewed by the '752 Examiner were material to, but not disclosed during, the '094 Prosecution: Yamamoto, Kozlik, Francisco, Chiu, and Fisher.

xx. Yamamoto, Kozlik, Chui, and Fisher relate to the limitations of the '094 Application that call for a buffer memory. Yamamoto, Kozlik and Chiu relate to the limitations of the '094 Patent that call for a network interface device. Kozlik, Chiu, and Fisher relate to the limitations of the '094 Patent that call for a frame transfer task. Francisco relates to the limitations of the '094 Application that call for a threshold value.

yy. Three of the '752 References (Yamamoto, Kozlik, and Fischer) were cited again to at least the assignee and prosecution counsel of the '752 Application in the December 23, 1993 '752 ISR.

zz. Further, at least prosecution attorney Mark Haynes and assignee 3Com Corporation were aware of additional references in view of the '752 EP SSR

dated April 28, 1995. The '752 EP SSR cited the '752 EP References, namely, Jen and the IBM Reference.

- aaa. Jen relates to limitations of the '094 Application that call for a buffer memory. The IBM Reference relates to the limitation of the '094 Application that calls for threshold value that is dynamically programmable.
- bbb. The '752 References and the '752 EP References were material to the claims of the '094 Application because the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- ccc. Most of the '752 Applicants were participants in the '094 Prosecution and had a duty of candor before the USPTO in the '094 Prosecution.
- ddd. Some or all of the '752 Applicants knew of facts material to the '094 Prosecution: (i) the '752 Application, the '752 PCT, and the '752 EP, (ii) the '752 Rejections, the '752 ISR, and the '752 EP SSR, and (iii) the '752 References and the '752 EP References. That is, they knew of the similarity in disclosure between the '094 and '752 disclosures, and they knew that the '752 Examiner had found the '752 References relevant to the '752 Application and the '752 PCT, and had twice rejected the '752 Application. They also knew that the examiner for the '752 EP had found the '752 EP References relevant to the '752 EP.
- eee. However, neither the '752 Application, the '752 PCT, and the '752 EP nor the '752 Rejections, the '752 ISR, the '752 EP SSR, the '752 References, and the '752 EP References were disclosed in the '094 Prosecution.

fff. The '752 Application, the '752 PCT, the '752 EP, the '752 Rejections, the '752 ISR, the '752 EP SSR, the '752 References, and the '752 EP References were therefore concealed from the '094 Examiner by the '752 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '406 Patent and PCT Application

ggg. The '094 Applicants committed inequitable conduct during the '094 Prosecution by failing to disclose the applications, rejections, and references related to the '406 Patent.

hhh. The '406 Application, which ultimately led to the '406 Patent was filed on September 18, 1992, about two months after the filing of the '872 Application, the parent application of the '094 Application. Most of the '406 Applicants were participants in the '094 Prosecution. That is, prosecution attorney Mark Haynes, named inventors Brian Peterson and David R. Brown, and assignee 3Com Corporation were also participants in the '094 Prosecution.

iii. The '406 PCT was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and David R. Brown) and the same assignee (3Com Corporation) as the '094 Application.

jjj. The '094 Examiner was different from the '406 Examiner and the examiner for the '406 PCT.

kkk. The disclosures of the '094 Application and the '406 Application overlap to a significant extent.

III. All of the '406 References reviewed by the '406 Examiner were material to, but not disclosed during, the '094 Prosecution.

mmm. Kinnie, Boothroyd, Benken, Papenberg, Chisholm, Brooks, Kinoshita, Pleva, Vo, Potter, Kelley, Nguyen, and Banks relate to the limitations of the '094 Application that call for a buffer memory. Benken relates to the limitations of the '094 Application that call for a frame transmission task. Benken relates to the limitations of the '094 Application that call for a network interface device. Benken relates to the limitations of the '094 Application that call for reading a descriptor for a frame.

nnn. Five of the '406 References (Vo, Benken, Kinoshita, Chisholm, and Weber) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '406 Application on January 11, 1994 in the '406 ISR. These references were considered by the searching authority as relevant and/or invalidating.

ooo. The '406 References were material to the '094 Prosecution because the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

ppp. Most of the '406 Applicants also participated in the '094 Prosecution and therefore had a duty of candor before the USPTO in the '094 Prosecution. That is, at least inventors Brian Petersen and David R. Brown, assignee 3Com Corporation, and prosecution attorney Mark Haynes had a duty of candor in the '094 Prosecution.

qqq. Some or all of the '406 Applicants knew of facts material to the '094 Prosecution:

(i) the '406 Application and the '406 PCT, (ii) the '406 Rejections and the '406 ISR, and (iii) the '406 References. That is, they knew of the similarity in disclosure between the '094 Application and the '406 Application, and at least assignee 3Com Corporation and prosecution attorney Mark Haynes knew that the '406 Examiner had found the '406 References relevant to the '406 Application and the '406 PCT, and had twice rejected the '406 Application.

rrr. However, neither the '406 Application and the '406 PCT, nor the '406 Rejections, the '406 ISR, and the '406 References were disclosed in the '094 Prosecution.

sss. The '406 Application, the '406 PCT, the '406 Rejections, and the '406 References were therefore concealed from the '094 Examiner by the '406 Applicants, with knowledge of their materiality of this information and, on information and belief, with intent to deceive.

The '627 Patent and PCT Application

ttt. The '094 Applicants committed further acts of inequitable conduct during the '094 Prosecution by failing to disclose the applications, rejections, and references related to the '627 Patent.

uuu. The '627 Application, which ultimately led to the '627 Patent was a continuation in-part application of the '406 Patent and was filed on Aug 27, 1993. The '627 Applicants, namely, prosecution attorney Mark Haynes, named inventor Brian Peterson, and assignee 3Com Corporation were also participants in the '094 Prosecution.

vvv. The '627 PCT claims priority to the '627 Application and was filed on August 25, 1994 by the same counsel (Mark Haynes) on behalf of one of the same named inventors (Brian Peterson) and the same assignee (3Com Corporation) as the '094 Application.

www. The '094 Examiner was different from the '627 Examiner and the examiner for the '627 PCT.

xxx. On December 19, 1994, and July 27, 1995, the '627 Examiner issued rejections ("the '627 Rejections") of the '627 Application.

yyy. Prosecution attorney Mark Haynes cited ten of the '627 References (Kinnie, Benken, Weber, Chisholm, Brooks, Kinoshita, Pleva, Vo, Kelly, Nguyen) in the '627 IDS on February 4, 1994. Therefore, on information and belief, at least Mr. Haynes had knowledge of these references by February 4, 1994.

zzz. Moyer, Miki, Benken, and Brooks relate to the limitations of the '094 Application that call for a buffer memory. Benken relates to the limitations of the '094 Application that call for a frame transmission task. Benken relates to the limitations of the '094 Patent that call for reading a descriptor for a frame.

aaaa. During the '094 Prosecution, seven of the '627 References (Vo, Benken, Moyer, Schwartz, Hirasawa, Robinson, and Banks) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '627 Application on February 13, 1995 in the '627 ISR. Vo, Benken, and Moyer were identified by the searching authority as of particular relevance.

bbbb. The '627 References were material because some of the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or

more of these references. At the very least, a reasonable examiner would have wanted to review the '627 Rejection and the '627 References to determine their effect on the patentability of the '094 Application.

cccc. All of the '627 Applicants also participated in the '094 Prosecution and therefore had a duty of candor before the USPTO in the '094 Prosecution. At least the prosecution attorney (Mark Haynes) and the assignee (3Com Corporation) were participants in the prosecution of the '627 PCT and were persons with a duty of candor in the '094 Prosecution.

dddd. Some or all of the '627 Applicants knew of facts material to the '094 Prosecution:

(i) the co-pendency of the '627 Application and the '627 PCT, (ii) the December 19, 1994 Rejection, the '627 IDS, and the '627 ISR, and (iii) the '627 References.

That is, at least assignee 3Com Corporation and prosecution Mark Haynes knew that the '627 Examiner had found the '627 References relevant to the '627 Application and the '627 PCT, and had twice rejected the '627 Application.

eeee. However, neither the '627 Application and the '627 PCT, nor the '627 Rejections, the '627 ISR, and the '627 References were disclosed in the '094 Prosecution.

ffff. The '627 Application, the '627 PCT, the '627 Rejections, the '627 ISR, and the '627 References were therefore concealed from the '094 Examiner by the '094 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '874 Patent, PCT and EP Applications

gggg. The '094 Applicants committed inequitable conduct during the '094 Prosecution by failing to disclose the applications, rejections, and references related to the '874 Patent.

hhhh. The '874 Application, which ultimately led to the '874 Patent was filed on February 2, 1993. The '874 Applicants, namely prosecution attorney Mark Haynes, named inventors Brian Peterson and W. Paul Sherer, and assignee 3Com Corporation, were also participants in the '094 Prosecution.

iiii. The '874 PCT claims priority to the '874 Application (having substantially the same disclosure) and was filed on December 28, 1993 by the same counsel (Mark Haynes) on behalf of the two same named inventors (Brian Peterson and W. Paul Sherer) and the same assignee (3Com Corporation) as the '874 Application and '094 Application. The '874 EP bears the same filing date as the '874 PCT and entered the regional phase on July 13, 1995 based on the '874 PCT.

jjjj. The '094 Examiner was different from the '874 Examiner and the examiner for the '874 PCT and the '874 EP.

kkkk. The disclosures of the '094 Application and the '874 Application overlap to a significant extent.

llll. In the Preliminary Amendment of March 3, 1995, the '094 Applicants added claims directed to a CSMA/CD network in the '094 Application. During the '872 Prosecution, the '094 Applicants argued that the token ring network disclosed by Firoozmand et al. is distinguished from claims directed toward a CSMA/CD network. For example, the prosecution counsel of the '094 Application argued that:

In particular, the invention as recited in the new claims is limited to a CSMA/CD network adapter.

Art related to a CSMA/CD network was therefore particularly material to the '094 Prosecution in view of the prosecution attorney's arguments for allowance of claims directed towards a CSMA/CD network.

mmmm. All of the '874 References reviewed by the '874 Examiner were material to, but not disclosed during, the '094 Prosecution. Applicants also cited two of the '874 References (the Chiang and Fujitsu References) to the '874 Examiner on January 5, 1996 in an Information Disclosure Statement ("the '874 IDS"). That is, at least by January 5, 1996, the '874 Applicants had knowledge of the Chiang and Fujitsu References and had knowledge of the materiality of these references to the '874 Prosecution. The '094 Patent issued on March 24, 1998.

nnnn. Davis, Akashi, Takayama, Yasui, Jibbe, Miyazaki, Carson, Chiang, and Etherstar relate to the limitations of the '094 Application that call for a buffer memory. Carson, the Chiang Reference, and the Fujitsu Reference relate to the limitations of the '094 Patent that call for a network interface device. The Chiang and Fujitsu References relate to the limitations of the '094 Patent that call for a frame transfer task and a CSMA/CD computer network.

oooo. Three of the '874 References (Akashi, Takayama, and Fukasawa) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '874 Application in the '874 ISR on December 23, 1993. These references were identified again by the searching authority as of particular relevance.

pppp. The '874 References were material because the features of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

qqqq. All of the '874 Applicants also participated in the '094 Prosecution and therefore were persons with a duty of candor before the USPTO in the '094 Prosecution.

rrrr. Some or all of the '874 Applicants knew of facts material to the '094 Prosecution: (i) the '874 Application, the '874 PCT, and the '874 EP, (ii) the '874 IDS and the '874 ISR, and (iii) the '874 References. That is, they knew of the similarity in disclosure between the '094 Application and the '874 Application, and they knew that the '874 Examiner had found the '874 References relevant to the '874 Application and the '874 PCT, and had twice rejected the '874 Application.

ssss. However, neither the '874 Application, the '874 PCT, and the '874 EP, nor the '874 Rejections, the '874 ISR, the '874 IDS, and the '874 References were disclosed in the '094 Prosecution.

tttt. The '874 Application, the '874 PCT, the '874 EP, the '874 Rejections, the '874 ISR, the '874 IDS and the '874 References were therefore concealed from the '094 Examiner by the '094 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

#### The '782 Patent

uuuu. The '094 Applicants committed further acts of inequitable conduct during the '094 Prosecution by additionally failing to disclose the application, rejection, and references related to the '782 Patent.

vvvv. The '782 Application, which ultimately led to the '782 Patent, was filed on July 2, 1992. The '782 Applicants were also participants in the '094 Prosecution. That is, named inventor Paul W. Sherer and the assignee 3Com Corporation were also participants in the '094 Prosecution.

wwww. The '094 Examiner was different from the '782 Examiner. xxxx. The disclosures of the '094 Application and the '782 Application relate to substantially the same subject matter. For example, the '782 Patent discloses a host interface and a receive threshold and therefore relates to the limitations of the '094 Application.

yyyy. The '094 Applicants were aware of the '782 Rejections of January 14, 1994 and July 7, 1994.

zzzz. During the '782 Prosecution, the '782 Examiner reviewed the '782 References. aaaaa. Giancarlo relates to the limitations of the '094 Patent that call for a buffer memory, and transferring a data frame. Bitner relates to the limitations of the '094 Application that call for a threshold determination. O'Brien relates to the limitations of the '094 Application that call for a buffer memory.

bbbb. The '782 References were material to the claims of the '094 Application because the limitations of the claims of the '094 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

cccc. The '782 Applicants were participants in the '094 Prosecution and had a duty of candor before the USPTO in the '094 Prosecution. That is, named inventor Paul W. Sherer and assignee 3Com Corporation had a duty of candor in the '094 Prosecution.

ddddd. The '782 Applicants knew of facts material to the '094 Prosecution: (i) the '782 Application, (ii) the '782 Rejections, and (iii) the '782 References. That is, all of the '782 Applicants knew of the similarity in disclosure between the '094 Application and the '782 Application, and they knew that the '782 Examiner had found the '782 References relevant to the '782 Application and had twice rejected the '782 Application.

eeeeee. However, neither the '782 Application, nor the '782 Rejections and the '782 References were disclosed in the '094 Prosecution.

ffffff. The '782 Application, the '782 Rejections, and the '782 References were therefore concealed from the '094 Examiner by the '782 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

ggggg. The existence of other patent applications that were co-pending with the '094 Patent, related to networking technology, and owned by 3Com Corporation or their subsidiary or associated corporation, including the applications' related foreign filings, and all material references cited in the applications' prosecution were not cited during the '094 Prosecution. These other patent applications include the applications for U.S. Patents: 5,459,854; 5,392,399; 5,471,618; 5,483,640; 5,511,171; 5,459,840; 5,526,489; 5,386,470; 5,517,627; 5,387,902; 5,473,765; 5,423,002; 5,530,703; 5,541,911; 5,535,338; 5,781,726; 5,793,994; 5,805,827; 5,771,235; 5,828,835; 5,802,054; 5,784,582; 5,910,954; and 5,937,169.

hhhh. Some or all of the persons with a duty of candor in the '094 Prosecution were participants in the prosecution of the other patent applications. Some or all of the persons with a duty of candor in the '094 Prosecution knew that these other applications were material to the '094 Prosecution.

iiii. On information and belief, these other applications and materials were concealed from the '094 Examiner by the '094 Applicants with knowledge of their materiality and, on information and belief, with intent to deceive.

Intel 82586 Local Area Network Coprocessor

jjjj. Intel 82586 local area network coprocessor and the documentation describing it (“the Intel 82586”) is material prior art as defined by 37 C.F.R. § 1.56(b) because, as is set forth more fully in Defendants’ P.R. 3-3 Invalidity Contentions filed June 4, 2010 (hereby incorporated by reference as if more fully set forth herein), the Intel 82586 and the documentation describing it separately and collectively invalidates all of the asserted claims in the '094 Patent. Accordingly, a reasonable examiner would have found that the Intel 82586 and the documentation describing it, alone or in combination with other information, was material to the prosecution of the '094 Patent because, at a minimum, it established a prima facie case of unpatentability for all claims in the '094 Patent.

kkkk. Further, the Intel 82586 was known by the '094 Applicants to be prior art material to the application which led to the '094 Patent, because the Intel 82586 is recited as relevant prior art in the Background of the Invention section of the '094 Application.

lllll. On information and belief, some or all of the '094 Applicants had full knowledge of the operation and features of the Intel 82586, because they were able to summarize certain aspects of the operations and features of the Intel 82586 in the Background Section of the '094 Patent.

mmmmm. The prosecution history of the '094 Patent demonstrates that the '094 Applicants withheld the source of their information concerning the operation and functionality of the Intel 82586 from the PTO during the filing and prosecution of the '094 Application because only very limited disclosure was made of the Intel 82586 chip in the background of the '094 Patent and no documentation describing its features or functionality was provided to the USPTO, despite the fact that the chip and its documentation must have been known to some or all of the '094 Applicants in order to provide the information set forth in the Background Section of the '094 Patent.

nnnnn. As is set forth more fully in Defendants' Invalidity Contentions, the documentation for the Intel 82586 would have disclosed that the '094 Applicants' description of the functionality and operation of that chip was incomplete and misleading and that, in fact, the chip and its documentation invalidated at least all of the asserted claims of the '094 Patent.

ooooo. A reasonable examiner also would have found that the '094 Applicants' description of the Intel 82586 and the '094 Applicants' assertions of patentability for the '094 Application were inconsistent with, and refuted by, the features and operation of the Intel 82586 and that the documentation demonstrating these inconsistencies, but withheld by some or all of the '094 Applicants, was not

cumulative to information in the prosecution record, including cited references and documented communications between the '094 Applicants and PTO.

ppppp. The prosecution history of the '094 Patent therefore demonstrates that the '094 Applicants who were knowledgeable about the features and operation of the Intel 82586 chip misrepresented and knowingly and intentionally concealed material information regarding the state of the prior art, and specifically the features and operation of the Intel 82586.

qqqqq. The '094 Applicants obtained allowance of claims then pending in the '094 Application as a result of not fully disclosing the Intel 82586 and withholding documentation concerning its features and functionality, by misrepresenting the true state of the prior art, and by misrepresenting how the Intel 82586 operated.

rrrrr. The '094 Patent is therefore unenforceable due to inequitable conduct.

14. Apple alleges that the '313 Patent is unenforceable by reason of inequitable conduct during the prosecution of the application that led to the issuance of the '313 Patent ("the '313 Prosecution") committed by the inventors, their counsel, 3Com Corporation, and/or others involved in the '313 Prosecution ("the '313 Applicants") as outlined below. In particular, Apple alleges that:

a. The '313 Application, which ultimately led to the '313 Patent, was filed on the same date as the '459 and '872 Applications (July 28, 1992) on behalf of named inventors Brian Peterson, W. Paul Sherer, David R. Brown, and Lai-Chin Lo, and named assignee 3Com Corporation. Mark Haynes acted as prosecution counsel

from the filing of the '313 Application to the issuance of the '313 Patent. The '313 Patent issued on March 29, 1994.

The '459 Patent, PCT, and EP Applications

- b. The '313 Applicants committed inequitable conduct during the '313 Prosecution by failing to disclose the applications, rejections, and references related to another of the Patents-in-Suit, the '459 Patent.
- c. The '459 Application, which ultimately led to the '459 Patent, was filed on the same date as the '313 Application. The '459 Applicants, namely, prosecution attorney Mark Haynes, named inventors Brian Petersen, W. Paul Sherer, David R. Brown, and Lai-Chin Lo, and named assignee 3Com Corporation were also participants in the '313 Prosecution.
- d. The '459 PCT claims priority to the '459 Application and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of all of the same named inventors (Brian Petersen, W. Paul Sherer, David R. Brown, and Lai-Chin Lo) and the same named assignee (3Com Corporation) as the '313 Application. The '459 EP bears the same filing date as the '459 PCT and entered the regional phase on February 25, 1994 based on the '459 PCT.
- e. Although the '313 Examiner was the same as the '459 Examiner Application, the Federal Circuit has held that the duty to cross-cite material information between related applications still holds in such situations. *See, e.g., McKesson Info. Solutions, Inc. v Bridge Med., Inc.*, 487 F.3d 897, 925 (Fed. Cir. 2007).
- f. The disclosures of the '313 Application and the '459 Application overlap to a significant extent. The '459 Patent states “[t]he present application is related to

co-pending U.S. patent application entitled NETWORK INTERFACE WITH HOST INDEPENDENT BUFFER MANAGEMENT, Ser. No. 07/921,519, filed Jul. 28, 1992, which was owned at the time of invention and is currently owned the same assignee.” That is, the ’459 Patent states that it is related to the co-pending ’313 Application, but no mention of the ’459 Application is made in the ’313 Application. Thus, upon information and belief, the ’459 Applicants had knowledge of the important relationship between the ’313 and ’459 Applications.

- g. All of the ’459 References reviewed by the ’459 Examiner and cited to the ’313 Applicants in the October 14, 1993 Notice of Allowability were material to, but not disclosed during, the ’313 Prosecution.
- h. All of the ’459 References relate to the limitations of the ’313 Application that call for a buffer memory. At least the Gulick 1 reference relates to the limitations of the ’313 Application that call for a network interface means and a host interface means.
- i. While the ’313 Prosecution was still pending, the ’459 References (Gulick 1, Gulick 2, and Casper) were cited again to at least the assignee (3Com Corporation) and prosecution attorney (Mark Haynes) of the ’459 Application on November 15, 1993 in the ’459 ISR.
- j. The ’459 References were material to the claims of the ’313 Application because many, if not all, the features of the claims of the ’313 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- k. All of the ’459 Applicants were participants in the ’313 Prosecution and had a duty of candor in the ’313 Prosecution. That is, at least prosecution attorney

Mark Haynes, named inventors Brian Petersen, W. Paul Sherer, David R. Brown, and Lai-Chin Lo, and named assignee 3Com Corporation of the '459 Prosecution had a duty of candor in the '313 Prosecution.

- l. Some or all of the '459 Applicants knew of facts material to the '313 Prosecution:
  - (i) the co-pendency of the '459 Application, the '459 PCT, and the '459 EP, (ii) the '459 ISR, and (iii) the '459 References. That is, they knew of the similarity in disclosure between the disclosures of the '459 Application and the '313 Application and they knew that the '459 Examiner had found the '459 References relevant to the '459 Application and the '459 PCT.
- m. However, neither the co-pendency of the '459 Application and the '459 PCT and the '459 EP, nor the '459 ISR and the '459 References were disclosed in the '313 Prosecution.
- n. The '459 Application, the '459 PCT, the '459 EP, and the '459 References were therefore concealed from the '313 Examiner by the '459 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '872 Patent, PCT, and EP Applications

- o. The '313 Applicants committed inequitable conduct during the '313 Prosecution by failing to disclose the applications, rejections, and references related to the '872 Patent.
- p. The '872 Application, which ultimately led to the '872 Patent, was filed on the same date by the same counsel (Mark Haynes) on behalf of two of the same

named inventors (Brian Peterson and David Brown) and the same assignee (3Com Corporation) as the '313 Application.

- q. A third person, W. Paul Sherer, was added as an inventor during the prosecution of the '872 Patent. W. Paul Sherer was also a participant in the '313 Prosecution and is also one of the '872 Applicants.
- r. The '872 PCT claims priority to the '872 Application (having substantially the same disclosure) and was filed on July 27, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and David Brown) and the same assignee (3Com Corporation) as the '313 Application. The '872 EP bears the same filing date as the '872 PCT and entered into the region phase on February 25, 1994 based on the '872 PCT.
- s. The '313 Examiner was different from the '872 Examiner and the examiner for the '872 PCT and '872 EP.
- t. The disclosures of the '313 Application and the '872 Application overlap to a significant extent.
- u. The '872 Patent states “[t]he present application is related to co-pending U.S. patent application entitled NETWORK INTERFACE WITH HOST INDEPENDENT BUFFER MANAGEMENT, application Ser. No. 07/921,519, filed 28 Jul. 1992, now U.S. Pat. No. 5,299,313, which was owned at the time of invention and is currently owned by the same assignee.” That is, the '872 Patent states that it is related to the co-pending '313 Application, but no mention of the '872 Application is made in the '313 Application. Thus, upon information and belief, the '872 Applicants had knowledge of the important relationship between

the '313 and '872 Applications, but failed to disclose such information to the '313 Examiner.

- v. In his Notice of Allowability of September 21, 1993, the '313 Examiner stated that the pending claims were being allowed because:

The prior art does not show or render obvious, *inter alia*, the network interface controller for a host system/network transceiver in which a host system includes a host address space, and a buffer memory is located outside of the address space and further in which the interface manages data transfer between the host address space and the buffer memory in an operational manner transparent to the host system.

- w. In his consideration of the Notice of Allowability, the '313 Examiner cited only the Benken reference.
- x. On October 26, 1993, prior to the issuance of the '313 Patent, the '872 Examiner mailed an Office Action to 3Com's prosecution counsel, Mark A. Haynes. In the Office Action, the Examiner relied on Firoozmand *et al.* as a basis for a § 102(a) anticipation rejection. The Examiner also relied on various combinations of the Firoozmand *et al.*, Firoozmand, Heath, Koch, and Tarrab as bases for obviousness-type rejections of certain claims pending in the '872 Application. In a Notice of References Cited, included with the October 26, 1993 Office Action, the Examiner made of record the Bentley reference. In an Office Action dated July 6, 1994, the Examiner for the '872 Application relied on Bentley as a basis for an obviousness-type rejection of certain pending claims.
- y. The '872 References are material to the '313 Prosecution because the '872 References disclose, singly or in combination, most or all of the elements of the claims of the '313 Application listed by the '313 Examiner Notice of Allowance.

At least the Firoozmand *et al.* and Firoozmand references fully anticipate and/or render obvious a “network interface controller,” a “host system [that] includes a host address space,” a “buffer memory [] located outside of the address space,” and “the interface manages data transfer between the host address space and the buffer memory in an operational manner transparent to the host system,” all of which the ’313 Examiner listed as novel in the Notice of Allowance in the ’313 Application. The ’872 References were later deemed sufficiently material to include in an Information Disclosure Statement (IDS) during the ’094 Prosecution (one of the Patents-in-Suit) on August 14, 1995.

- z. The ’872 References are not cumulative to the prior art made of record during the ’313 Prosecution. On information and belief, there is a substantial likelihood that a reasonable examiner would have considered those references important in deciding whether to allow the ’313 Patent to issue.
- aa. David R. Brown and Brian Petersen, named inventors on the ’313 Patent and the ’872 Patent, were aware of at least the Firoozmand et al. patent prior to the issuance of the ’313 Patent. By February 15, 1994, both Mr. Brown and Mr. Petersen had executed a declaration in which they declared as follows:

We have been informed that claims 1, 3, 6 and 11 in the above identified U.S. Patent Application have been rejected under 35 U.S.C. §102(a) as being anticipated by Firoozmand, *et al.* U.S. Patent No. 5,043,981 which was issued August 27, 1991 and filed May 29, 1990 (the effective date of the reference”).

‘872 Application, § 1.131 Declaration, p. 1.

- bb. During the ’313 Prosecution, four of the ’872 References (Firoozmand et al., Koch, Heath, and Tarrab) were cited again to at least the assignee (3Com

Corporation) and prosecution counsel (Mark Haynes) of the '872 Application on December 7, 1993 in the '872 ISR. These references were identified by the searching authority as of "particular relevance," rendering the claimed invention anticipated or obvious.

- cc. All of the '872 Applicants also participated in the '313 Prosecution and were persons with a duty of candor before the USPTO in the '313 Prosecution. At least the prosecuting attorney (Mark Haynes) and assignee (3Com Corporation) were participants in the prosecutions of the '872 PCT and the '872 EP and were persons with a duty of candor in the '313 Prosecution.
- dd. The '872 Applicants knew of facts material to the '313 Prosecution: (i) the co-pendency of the '872 Application, the '872 PCT, and the '872 EP, (ii) the October 26, 1993 Rejection, and (iii) the '872 References. The '872 Applicants knew that the '872 Examiner had found these references to disclose the features of the combination which they had claimed to be novel in the '313 Application and which the '313 Examiner itemized in his Notice of Allowance.
- ee. Additionally, and for the same reasons, at least assignee 3Com Corporation and prosecution attorney Mark Haynes were aware of the materiality of the '872 ISR to the '313 Prosecution.
- ff. None of (i) the co-pendency of the '872 Application, the '872 PCT, and the '872 EP, (ii) the October 26, 1993 '872 Rejection, and (iii) the '872 References were disclosed in the '313 Prosecution.
- gg. The '872 Application, the '872 PCT, the '872 EP, the October 26, 1993 '872 Rejection, and the '872 References were therefore concealed from the '313

Examiner by the '872 Applicants, with knowledge of their materiality and, on information and belief, with an intent to deceive.

'752 Patent and PCT Application

- hh. The '313 Applicants committed further acts of inequitable conduct during the '313 Prosecution by additionally failing to disclose the applications, rejections, and references related to the '752 Patent.
- ii. The '752 Application, which ultimately led to the '752 Patent, was filed on September 18, 1992, about two months after the filing of the '313 Application. The '752 Applicants, namely prosecution attorney Mark Haynes, named inventors Brian Peterson and Lai-Chin Lo, and assignee 3Com Corporation were also participants in the '313 Prosecution.
- jj. The '752 PCT claims priority to the '752 Application (having substantially the same disclosure) and was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and Lai-Chin Lo) and the same assignee (3Com Corporation) as the '313 Application.
- kk. The '313 Examiner was different from the '752 Examiner and the examiner for the '752 PCT.
- ll. The disclosures of the '313 Application and the '752 Application overlap to a significant extent.
- mm. Before the '313 Examiner issued his Notice of Allowability in the '313 Application, the '752 Examiner issued the '752 Rejections on January 26, 1993 and on July 15, 1993.

- nn. All of the '752 References reviewed by the '752 Examiner were material to but not disclosed during, the '313 Prosecution.
- oo. The '752 References relate to a host system, a network interface means, and a buffer memory. Fischer, in particular, relates to a buffer memory outside of the host address space and sharing the host address space with the host.
- pp. During the '313 Prosecution, three of the '752 References (Yamamoto, Kozlik, and Fischer) were cited again to at least the assignee and prosecution attorney of the '752 Application on December 23, 1993 in the '752 ISR.
- qq. The '752 References were material to the claims of the '752 Application because the limitations of the claims of the '313 Application were disclosed by, inherent in, or obvious in light of one or more of these references.
- rr. All of the '752 Applicants were participants in the '313 Prosecution and had a duty of candor before the USPTO in the '313 Prosecution.
- ss. Some or all of the '752 Applicants knew of facts material to the '313 Prosecution: (i) the co-pendency of the '752 Application and '752 PCT, (ii) the '752 Rejections and the '752 ISR, and (iii) the '752 References. That is, they knew of the similarity in disclosure between the '313 Application and '752 Application, and they knew that the '752 Examiner had found the '752 References relevant to the '752 Application and the '752 PCT, and had twice rejected the '752 Application.
- tt. However, neither the co-pendency of the '752 Application and the '752 PCT, nor the '752 Rejections, the '752 ISR, and the '752 References were disclosed in the '313 Prosecution.

uu. The '752 Application, the '752 PCT, the '752 Rejections, and the '752 References were therefore concealed from the '313 Examiner by the '752 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '406 Patent and PCT Application

vv. The '313 Applicants committed further acts of inequitable conduct during the '313 Prosecution by failing to disclose the applications, rejections, and references related to the '406 Patent.

ww. The '406 Application, which ultimately led to the '406 Patent, was filed on September 18, 1992, about two months after the filing of the '313, '459, and '872 Applications. The '406 Applicants, namely, prosecution attorney Mark Haynes, named inventors Brian Peterson, Lai-Chin Lo, and David R. Brown, and assignee 3Com Corporation were also participants in the '313 Prosecution.

xx. The '406 PCT claims priority to the '406 Application (having substantially the same disclosure) and was filed on September 17, 1993 by the same counsel (Mark Haynes) on behalf of three of the same named inventors (Brian Peterson, Lai-Chin Lo, and David R. Brown) and the same assignee (3Com Corporation) as the '313 and '406 Applications.

yy. The '313 Examiner was different from the '406 Examiner and the examiner for the '406 PCT.

zz. The disclosures of the '313 Application and the '406 Application overlap to a significant extent.

- aaa. The '406 Application states that it is related to the '313 Application, but no mention of the '406 Application is made in the '313 Application.
- bbb. On November 9, 1993 the '406 Examiner issued a rejection of the '406 Application ("the '406 Rejection").
- ccc. During prosecution of the '406 Patent, the '406 References were cited against the '406 Application.
- ddd. These references relate to the limitations of the '313 Application. Kinnie, Boothroyd, Benken, Papenberg, Chisholm, Brooks, Kinoshita, Pleva, Vo, Potter, Kelley, Nguyen, and Banks relate to the limitations of the '313 Patent that call for a buffer memory. Benken relates to the limitations of the '313 Patent that call for transferring a data frame. Benken relates to the limitations of the '313 Patent that call for a network interface logic. Benken relates to the limitations of the '313 Patent that call for transfer descriptors.
- eee. All of the '406 References reviewed by the '406 Examiner were therefore material to the '313 Application, but none of them were disclosed during the '313 Prosecution.
- fff. While the '313 Prosecution was ongoing, five of the '406 References (Vo, Benken, Kinoshita, Chisholm, and Weber) were cited again to at least the assignee (3Com Corporation) and prosecution counsel (Mark Haynes) of the '406 Application on January 11, 1994 in the '406 ISR. These references were considered by the searching authority as relevant and/or invalidating.

ggg. The '406 References were material to the '313 Application because the features of the claims of the '313 Application were disclosed by, inherent in, or obvious in light of one or more of these references.

hhh. All of the '406 Applicants also participated in the '313 Prosecution and therefore had a duty of candor before the USPTO in the '313 Prosecution. At least prosecution attorney (Mark Haynes) and assignee (3Com Corporation) were participants in the prosecution of the '406 PCT and were persons with a duty of candor in the '313 Prosecution.

iii. Some or all of the '406 Applicants knew of facts material to the '313 Prosecution: (i) the co-pendency of the '406 Application and '406 PCT, (ii) the '406 Rejection and the '406 ISR, and (iii) the '406 References. That is, all of the '406 Applicants knew of the similarity in disclosure between the '313 Application and the '406 Application, and at least assignee 3Com Corporation and prosecution attorney Mark Haynes knew that the '406 Examiner had found the '406 References relevant to the '406 Application and the '406 PCT, and had twice rejected the '406 Application.

jjj. However, the co-pendency of the '406 Application and the '406 PCT, the '406 Rejection, the '406 ISR, and the '406 References were not disclosed in the '313 Prosecution.

kkk. The '406 Application, the '406 PCT, the '406 Rejections, and the '406 References were therefore concealed from the '313 Examiner by the '406 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '874 Patent and PCT Application

- lll. The '313 Applicants committed further inequitable conduct during the '313 Prosecution by failing to disclose the applications, rejections, and references related to the '874 Patent.
- mmm. The '874 Application, which ultimately led to the '874 Patent was filed on February 2, 1993. The '874 Applicants, namely prosecution attorney Mark Haynes, named inventors Brian Peterson and W. Paul Sherer, and assignee 3Com Corporation were also participants in the '313 Prosecution.
- nnn. The '874 PCT claims priority to the '874 Application (having substantially the same disclosure) and was filed on December 28, 1993 by the same counsel (Mark Haynes) on behalf of two of the same named inventors (Brian Peterson and W. Paul Sherer) and the same assignee (3Com Corporation) as the '313 Application.
- ooo. The '313 Examiner was different from the '874 Examiner and the examiner for the '874 PCT.
- ppp. The disclosures of '313 Application and the '874 Application overlap to a significant extent.
- qqq. All of the '874 Applicants also participated in the '313 Prosecution and therefore were persons with a duty of candor before the USPTO in the '313 Prosecution. At least the prosecution attorney (Mark Haynes) and the assignee (3Com Corporation) were participants in the prosecution of the '874 PCT and were persons with a duty of candor in the '313 Prosecution.
- rrr. The '874 Applicants, who all participated in the '313 Prosecution, knew of facts material to the '313 Prosecution: the co-pendency of the '874 Application and the

'874 PCT. That is, they knew of the similarity in disclosure between the '313 and '874 Applications.

sss. However, neither the co-pendency of the '874 Application nor of the '874 PCT were disclosed in the '313 Prosecution.

ttt. The co-pendency of the '874 Application and the '874 PCT were therefore concealed from the '313 Examiner by the '874 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '627 Patent and PCT Application

uuu. The '313 Applicants committed further acts of inequitable conduct during the '313 Prosecution by failing to disclose the applications, rejections, and references related to the '627 Patent.

vvv. The '627 Application, which ultimately led to the '627 Patent, was a continuation-in-part application of the '406 Patent and was filed on Aug 27, 1993. The '627 Applicants, namely, prosecution attorney Mark Haynes, named inventor Brian Peterson, and assignee 3Com Corporation were also participants in the '313 Prosecution.

www. The '313 Examiner was different from the '627 Examiner.

xxx. The '406 Application, of which the '627 Application was a continuation-in-part, states that it is related to the co-pending '313 Application. But no mention of the '406 or the '627 Applications are made in the '313 Application.

yyy. During the '313 Prosecution and before the '313 Patent issued, on February 4, 1994, prosecution attorney Mark Haynes filed the '627 IDS citing the '627 IDS References. One of the '627 IDS References was the Benken Reference, which

was cited earlier in the September 21, 1993 Notice of Allowance for the '313 Application. Because Mr. Haynes cited the Benken Reference in the '627 Application in the '627 IDS, Mr. Haynes knew of the related nature of the '313 Application and the '627 Application. Yet Mr. Haynes and the other '627 Applicants failed to disclose the other '627 IDS References to the '313 Examiner.

zzz. The '627 References were material to the '313 Prosecution because some or all of the features of the claims of the '313 Application were disclosed by, inherent in, or obvious in light of one or more of these references. At the very least, a reasonable examiner would have wanted to review the '627 IDS References to determine their effect on the patentability of the '313 Application.

aaaa. All of the '627 Applicants also participated in the '313 Prosecution and therefore had a duty of candor before the USPTO in the '313 Prosecution.

bbbb. Some or all of the '627 Applicants new of facts material to the '313 Prosecution: (i) the co-pendency of the '627 Application, and (ii) the '627 IDS and the '627 IDS References. That is, they knew of the '627 IDS References and knew that these references were material to the '627 Application. Based on the similarity of disclosure between the '627 Application and the '313 Application, they also knew that the '627 IDS References were material to the '313 Prosecution.

cccc. However, neither the co-pendency of the '627 Application, nor the '627 IDS and the '627 IDS References were disclosed in the '313 Prosecution.

dddd. The '627 Application, the '627 IDS, and the '627 IDS References were therefore concealed from the '313 Examiner by the '627 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

The '782 Patent

eeee. The '313 Applicants committed further acts of inequitable conduct during the '313 Prosecution by additionally failing to disclose the application, rejection, and reference related to the '782 Patent.

ffff. The '782 Application, which ultimately led to the '782 Patent, was filed on July 2, 1992, within one month of the filing of the '313 Application. The '782 Applicants were also participants in the '313 Prosecution. That is, named inventor Paul W. Sherer and the assignee 3Com Corporation were also participants in the '313 Prosecution.

gggg. The '313 Examiner was different from the '782 Examiner.

hhhh. The disclosures of the '313 Application and the '782 Application relate to substantially the same subject matter. For example, the '782 Patent discloses a buffer memory outside of the host address space and a host interface means for managing data transfers between the host address space and the buffer memory in operations transparent to the host system. This directly relates to the alleged invention claimed in the '313 Patent.

iiii. On January 14, 1994, before the '313 Patent issued, the '782 Examiner issued the '782 Rejection.

jjjj. During the '782 Prosecution and in the '782 Rejection, the '782 Examiner cited the Giancarlo Reference.

kkkk. Giancarlo relates to the limitations of the '313 Patent that call for a buffer memory and transferring data.

llll. The Giancarlo Reference was material to the claims of the '313 Application because the limitations of the claims of the '313 Application were disclosed by, inherent in, or obvious in light of the Giancarlo Reference.

mmmm. The '782 Applicants were participants in the '313 Prosecution and had a duty of candor before the USPTO in the '313 Prosecution. That is, named inventor Paul W. Sherer and assignee 3Com Corporation had a duty of candor in the '313 Prosecution.

nnnn. The '782 Applicants knew of facts material to the '313 Prosecution: (i) the co-pendency of the '782 Application, (ii) the '782 Rejection, and (iii) the Giancarlo Reference. That is, all of the '782 Applicants knew of the similarity in disclosure between the '313 Application and the '782 Application, and they knew that the '782 Examiner had found the Giancarlo Reference relevant to the '782 Application and had rejected the '782 Application.

oooo. However, neither the co-pendency of the '782 Application, nor the '782 Rejection and the Giancarlo Reference were disclosed in the '313 Prosecution.

pppp. The '782 Application, the '782 Rejection, and the Giancarlo Reference were therefore concealed from the '313 Examiner by the '782 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

#### The '313 PCT and EP Applications

qqqq. The Patentee committed inequitable conduct during the prosecution of the '313 Patent by failing to disclose the applications and references related to the '313 PCT and '313 EP.

rrrr. The ‘313 PCT claims priority to the ‘313 Application (having substantially the same disclosure) and was filed on July 27, 1993, by the same counsel on behalf of the same named inventors (Peterson, Brown, Sherer, and Lo) and the same assignee as the ‘313 Application. The ‘313 EP, based on the ‘313 PCT, was filed on February 25, 1994, and lists all four of the named inventors listed in the ‘313 Application.

ssss. On information and belief, the ‘313 Application was reviewed by a different examiner than the ‘313 PCT and the ‘313 EP.

tttt. The ‘313 PCT’s and the ‘313 EP’s disclosures overlap to a significant extent with the ‘313 Patent.

uuuu. On November 26, 1993, during the prosecution of the ‘313 Patent, the following references, *inter alia*, were cited in the ‘313 International Search Report (the ‘313 ISR): U.S. Patents 4,471,427 (Harris), 4,604,682 (Schwan), and 5,121,390 (Farrell) (collectively the ‘313 ISR References).

vvvv. The ‘313 ISR References were material to, but not disclosed during, the prosecution of the ‘313 Application. The ‘313 ISR References relate to the limitations of the ‘313 Patent. For example, all of the ‘313 ISR References relate to the limitations of the ‘313 Patent that call for a buffer memory. Harris and Farrell relate to the limitations of the ‘313 Patent that call for network interface logic. Harris relates to the limitations of the ‘313 Patent that call for a shared memory space.

wwww. The participants in the prosecution of the ‘313 PCT and EP Applications were persons with a duty of candor in the prosecution that led to the ‘313 Patent.

xxxx. The '313 PCT and EP Applicants knew of the materiality to the '313 Application prosecution of (i) the co-pendency of the '313 PCT and '313 EP Applications, (ii) the '313 ISR, and (iii) the '313 ISR References, yet failed to disclose any of these actions or references in the prosecution of the '313 Patent.

yyyy. The (i) co-pendency of the '313 PCT and '313 EP Applications, (ii) '313 ISR, and (iii) '313 ISR References were therefore concealed from the examiner in the '313 Patent prosecution by the '313 PCT and EP participants with knowledge of their materiality and, on information and belief, with an intent to deceive, due to their high materiality and the lack of any apparent other reason for their non-disclosure.

zzzz. The existence of other patent applications that were co-pending with the '313 Patent, related to networking technology, and owned by 3Com Corporation or their subsidiary or associated corporation, including the applications' related foreign filings, and all material references cited in the applications' prosecution were not cited during the '313 Prosecution. These other patent applications include the applications for U.S. Patents: 5,459,854; 5,392,399; 5,471,618; 5,483,640; 5,511,171; 5,459,840; 5,526,489; 5,386,470; 5,387,902; 5,473,765, and 5,423,002.

aaaaa. Some or all of the persons with a duty of candor in the '313 Prosecution, were participants in the prosecution of these other patent applications. Some or all of the persons with a duty of candor in the '313 Prosecution knew that these other applications were material to the '313 Prosecution.

bbbb. On information and belief, these other applications and materials were concealed from the '313 Examiner by the '313 Applicants, with knowledge of their materiality and, on information and belief, with intent to deceive.

Intel 82586 Local Area Network Coprocessor

cccc. Intel 82586 local area network coprocessor and the documentation describing it ("the Intel 82586") is material prior art as defined by 37 C.F.R. § 1.56(b) because, as is set forth more fully in Defendants' P.R. 3-3 Invalidity Contentions filed June 4, 2010 (hereby incorporated by reference as if more fully set forth herein), the Intel 82586 and the documentation describing it separately and collectively invalidates all of the asserted claims in the '313 Patent. Accordingly, a reasonable examiner would have found that the Intel 82586 and the documentation describing it, alone or in combination with other information, was material to the prosecution of the '313 Patent because, at a minimum, it established a prima facie case of unpatentability for all claims in the '313 Patent.

ddddd. Further, the Intel 82586 was known by the '313 Applicants to be prior art material to the application which led to the '313 Patent, because the Intel 82586 is recited as relevant prior art in the Background of the Invention section of the '313 Application.

eeee. On information and belief, some or all of the '313 Applicants had full knowledge of the operation and features of the Intel 82586, because they were able to summarize certain aspects of the operations and features of the Intel 82586 in the Background Section of the '313 Patent.

fffff. The prosecution history of the '313 Patent demonstrates that the '313 Applicants withheld the source of their information concerning the operation and functionality of the Intel 82586 from the PTO during the filing and prosecution of the '313 Application because only very limited disclosure was made of the Intel 82586 chip in the background of the '313 Patent and no documentation describing its features or functionality was provided to the USPTO, despite the fact that the chip and its documentation must have been known to some or all of the '313 Applicants in order to provide the information set forth in the Background Section of the '313 Patent.

ggggg. As is set forth more fully in Defendants' Invalidity Contentions, the documentation for the Intel 82586 would have disclosed that the '313 Applicants' description of the functionality and operation of that chip was incomplete and misleading and that, in fact, the chip and its documentation invalidated at least all of the asserted claims of the '313 Patent.

hhhhh. A reasonable examiner also would have found that the '313 Applicants' description of the Intel 82586 and the '313 Applicants' assertions of patentability for the '313 Application were inconsistent with, and refuted by, the features and operation of the Intel 82586 and that the documentation demonstrating these inconsistencies, but withheld by some or all of the '313 Applicants, was not cumulative to information in the prosecution record, including cited references and documented communications between the '313 Applicants and PTO.

iiii. The prosecution history of the '313 Patent therefore demonstrates that the '313 Applicants who were knowledgeable about the features and operation of the Intel

82586 chip misrepresented and knowingly and intentionally concealed material information regarding the state of the prior art, and specifically the features and operation of the Intel 82586.

jjjj. The '313 Applicants obtained allowance of claims then pending in the '313 Application as a result of not fully disclosing the Intel 82586 and withholding documentation concerning its features and functionality, by misrepresenting the true state of the prior art, and by misrepresenting how the Intel 82586 operated.

kkkk. The '313 Patent is therefore unenforceable due to inequitable conduct.

15. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Apple requests the declaration of the Court that each of the '459, '872, '094, and '313 patents is unenforceable.

#### **JURY DEMAND**

16. Apple demands a trial by jury.

#### **EXCEPTIONAL CASE**

17. To the extent this is an exceptional case under 35 U.S.C. 285, Apple is entitled to recover from USEI for Apples' attorneys' fees and costs incurred in connection with this action.

#### **PRAYER FOR RELIEF**

Apple respectfully requests a judgment against USEI as follows:

- A. A declaration that Apple does not infringe and has not infringed any valid and enforceable claim of the patents-in-suit;
- B. A declaration that all claims of the patents-in-suit are invalid;
- C. A declaration that the patents-in-suit are unenforceable;
- D. That USEI take nothing by its Complaint against Apple;

- E. That the Court enter judgment against USEI and in favor of Apple and that USEI's Complaint be dismissed with prejudice;
- F. That the Court enter a judgment that this is an exceptional case under 35 U.S.C. § 285 and enter a judgment awarding Apple its costs and reasonable attorneys' fees; and
- G. That the Court grant Apple whatever further relief the Court may deem just and proper.

Respectfully submitted,

Date: June 4, 2010

/s/ Danny L. Williams

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ATTORNEYS FOR APPLE INC.

**CERTIFICATE OF SERVICE**

I hereby certify that the following counsel of record who are deemed to have consented to electronic service are being served this 4th day of June, with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by, electronic mail, facsimile transmission and/or first class mail on this same date.

Dated: June 4, 2010

/s/ Mark Dunglinson  
Litigation Paralegal